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THE PANAMA-PACIFIC INTERNATIONAL EXPOSITION.

ITS SANITARY SUPERVISION BY THE UNITED STATES PUBLIC HEALTH SERVICE.

Senior Surgeon C. C. Pierce of the United States Public Health Service, who is in charge of the sanitary supervision of the Panama-Pacific International Exposition, reports that under his direction a census has been taken of all employees living within the exposition grounds and a sanitary survey made of the grounds and buildings.

In the grounds there are 199 premises and 401 employees under sanitary supervision. This is exclusive of the exposition guard and employees of State buildings. By March 31 most of the employees on the grounds had been inoculated with antityphoid vaccine.

The exposition authorities have installed a complete plant for pumping ground water into wooden reservoirs constructed above the surface of the ground. From these reservoirs the water passes through a sand filter and after filtration is treated with liquid chlorine. The water is then pumped to a reservoir from which it is distributed to all parts of the grounds. The water plant is expected to furnish between 1,500,000 and 2,000,000 gallons of water per day.

The employees within the grounds are kept under careful supervision and any cases of communicable diseases which develop are immediately isolated.

Precautions are being taken to prevent the breeding of flies or the accumulation of stable refuse or other material in which flies lay their eggs. Such materials are treated with a mixture of carbolic acid, rosin, and caustic soda for the purpose of killing fly larvae and they are removed at short intervals. Restaurants and other places where garbage is likely to collect are provided with metal garbage cans with tight fitting covers. These are taken away every night, the contents incinerated and the cans disinfected by steam and returned.

Distributed throughout the grounds are both free and pay toilets. Especial attention is being given to their cleanliness and their maintenance in a sanitary condition. There are displayed in these toilets small placards relative to the prevention and cure of venereal diseases.

Attention is being given also to the food sold on the grounds, for the purpose of ascertaining that all food sold is wholesome and is handled only by persons free from tuberculosis and venereal diseases.

BUBONIC PLAGUE.**A MENACE TO AMERICAN SEAPORTS.¹**

By W. C. RUCKER, Assistant Surgeon General, United States Public Health Service.

At the present time bubonic plague is widely spread over the face of the globe. In the North American continent it exists in California, Seattle, and New Orleans. It has just broken out afresh in Cuba, and in South America the disease was reported only a short time since in Brazil, Ecuador, and Peru. In September last plague appeared in Italy and Greece, and only last August there occurred nine cases with three deaths in Liverpool, while in October plague broke out in pneumonic form in Portugal. Plague is present in Russia, cases having been reported in Astrakhan less than a year ago.

Egypt has plague, and within the past six months the disease has also appeared in British East Africa, German East Africa, Senegal, and the island of Mauritius. In India and Indo-China plague is endemic. Ceylon, Siam, and the Straits Settlements must be considered as infected. The Caspian coast of Persia reported cases as recently as last December, as did also Turkey in Asia. From April 1 to September 30, 1914, there were 8,794 cases with 7,728 deaths in the Dutch East Indies, and a report of October 31 last shows that the disease was still spreading there with unabated violence. Japan is infected. Plague exists in practically all of the large ports of China, and cases were reported less than a year ago in the Philippine Islands and Hawaii.

Plague is essentially a ship-borne disease, and therefore those ports which have free commercial communication with the rest of the world are liable to its incursions unless they erect those barriers which will prevent the introduction of rats. Plague is a rodent disease, transmitted usually from rat to rat and from rat to man through the intermediation of the flea. No one species of rat and no single species of flea is necessary for the transference of the bacillus of plague from the sick rat to the well rat or from the sick rat to the well man. Therefore, when it is desired to exclude plague, the operations to be put in force have for their object the exclusion of rats. It is not necessary that this exclusion shall be such as to interfere to any very great extent with the movement of commerce, but in order to be effective it must definitely remove rats from intimate contact with man.

The introduction of rats into a community may be prevented by the thorough fumigation of all ships entering the port, such fumigation to include the cargo as well. Unfortunately, the reliability of this method is somewhat lessened by the fact that it is exceedingly

¹ Read before the Fifth Annual Health Conference of the Medical and Chirurgical Faculty of Maryland, Baltimore, Md., Feb. 12, 1915.

difficult successfully to fumigate vessels for the extermination of rats, and while it is desirable for economic reasons that no more rats be introduced into the community, it should be borne in mind that this method is expensive and should it be omitted a single time the introduction of infected rodents might result. In order to be absolutely successful it should be applied to all vessels regardless of their port of departure. Plague in all probability exists among rodents in many ports of the world without the knowledge of the sanitary authorities of those ports, and there may be places in which the disease is known to exist, but we have no knowledge of it because for commercial reasons the existence of the disease is concealed. Furthermore, it is a well-known fact that in those ports which have a well rat-proofed water front, rats from infected countries leave one ship and, finding no asylum ashore, take passage on an outbound vessel. It is thus seen that the attempt to protect a city or a country against plague by the single measure of fumigation is at best an expensive makeshift.

The truth is that the only sure protection lies in adequate rat proofing. This, in order to be effective, should begin with the water front. No port which does not have rat-proof docks is safe from an incursion of plague, and the menace of this disease is such that it behooves the municipalities of the United States to take immediate steps looking to the accomplishment of this end. This is an economic as well as a public health measure. Every case of human plague in a community costs at least \$7,500. Every case of rodent plague in a community costs at least \$5,000. The enormous losses by reason of quarantine and the diversion of commerce are so great and vary so much as to be almost beyond even approximate estimation.

It is not sufficient that the water front alone be rat proofed. This work should be carried to a point where every premises occupied by man for domiciliary, mercantile, or manufacturing purposes, has been rendered proof against the entry of rodents, and once this has been accomplished the presence of rats in a community, or of disease among them, may be practically disregarded, since if rats have been thrown out of contact with man he need have no fear of the diseases which they carry. More than this, a city which is rat proof has a lower morbidity and mortality rate from the other communicable diseases than those cities which are not rat proof. This applies particularly to the environmental diseases which are so markedly affected by the improvement in the conditions under which man lives and works.

Rat proofing, then, is a prerequisite. There are several methods of making buildings rat proof, but the ideal is by the use of concrete on the ground areas, the stoppage of accidental openings around plumbing and electric wires, the abolition of harborage in double

ceilings, and the closure of roof openings by wire gratings. It should be borne in mind that no rat proofing is absolute against the entry of rats, but it can be made so effective that even should a rat gain entrance it would not find harborage and therefore would be forced to vacate the premises. To a certain extent the manner in which rat proofing is to be applied will depend upon the species of rats present in a given community. In those places in which the Norway rat, which is a ground dweller, is the only variety, particular attention should be directed to the ground areas. In those localities in which black rats and Alexandrine rats also occur, means must be taken to prevent their entry through roof openings because these species are climbing rats. In plague-prevention work, mice may be left out of consideration as they are practically a negligible factor in the perpetuation of plague. For example, out of some 255,000 rats examined in the city of New Orleans, only one infected mouse was found, and this under extraordinary conditions not liable to repetition.

Concrete is the ideal rat-proofing material. It is applied in the form of a side wall at least 2 feet below the surface of the ground, and 1 foot above the floor level. The first provision has been found necessary in order to prevent rats from burrowing underneath the concrete floor and there finding an ideal harborage. The rise above the level of the floor is necessary in frame buildings to prevent the rat from gnawing a hole at the junction of the floor with the side wall. This is particularly important because without it the rat will gain entrance to the space between the outer and inner walls and there be safe from molestation.

The area under the ground floor should be carefully filled in if there be no basement. On the filling should be tamped a layer of gravel, cracked rock, or hard cinders, and on this a concrete floor 5 inches in thickness, with an inch of smooth surfacing. This will protect the ground area, provided all accidental openings about plumbing, electric-light wires, and the like are carefully closed. If there is a basement, this should have a concrete floor with brick or concrete side walls, and in such instances it is preferable that the basement be constructed without a double ceiling, because, as was demonstrated by Surg. Gen. Blue as long ago as 1903, double ceilings make ideal harboring places for rats. Ceilings for the second and third stories should be torn out wherever practicable, thus doing away with the bottom of the boxlike structure which forms such an ideal rodent habitation. If this is not practicable, entrance to the box should be prevented by the use of metal flashings extending 6 inches on the floor and 6 inches up the side wall. This type of rat proofing is usually called "Class A" rat proofing, and is to be used in food depots of every sort and in those business houses which are particularly liable to attract rats. Stables form a subdivision of

Class A rat proofing. Their floors should be of concrete, adequately drained. Stalls should have in addition a grating of wood. Mangers should be metal lined. Grain should be kept in metal-lined, rat-proof bins, and manure should be kept in similar containers.

The rat proofing of domiciles is a much more simple matter. Unfortunately there is considerable prejudice against the use of concrete flooring in houses both on account of the expense of its installation and because the general public imagines that it makes cold floors. Houses may be rat proofed by elevation on brick or concrete piers at least 18 inches from the surface of the ground, the space beneath the house to be free to the entrance of cats and dogs, the natural enemies of the rat. In the case of frame dwellings, the space between the studdings should be stopped with concrete or brick to the height of 1 foot above the level of the ground floor to prevent rats from establishing a residence in the hollow wall.

In many situations it is not practicable to practice rat proofing by elevation, and in such instances a solid chain wall may be substituted, provided that the ground flooring is solid and in good repair. Rat proofing by elevation and by chain wall is known as class B rat proofing.

The value of rat proofing may be to a considerable extent vitiated if the out of door premises is in bad sanitary condition. Wood and lumber in the back yard should be rat proofed by being elevated 18 inches above the surface of the ground, and all outbuildings should be protected against the entrance or harborage of rats.

Another factor in diminishing the value of rat proofing is the presence of rat food. Rat proofing has for its purpose the exclusion of rats and the prevention of their nesting and breeding. By separating the rodent from his pabulum, one of the chief factors in attracting him to the premises has been abolished. This means first of all the maintenance of clean premises, and those cities in which the health officer rigorously enforces all ordinances requiring the cleanliness of the human environment have an additional safeguard against bubonic plague. It means the installation of water-tight metal garbage cans having accurately fitting lids. It means the collection and destruction of the waste products from houses, factories, and stores. If this is done not only is the home of man kept free of rats, but also flies and other insects do not breed in such abundance.

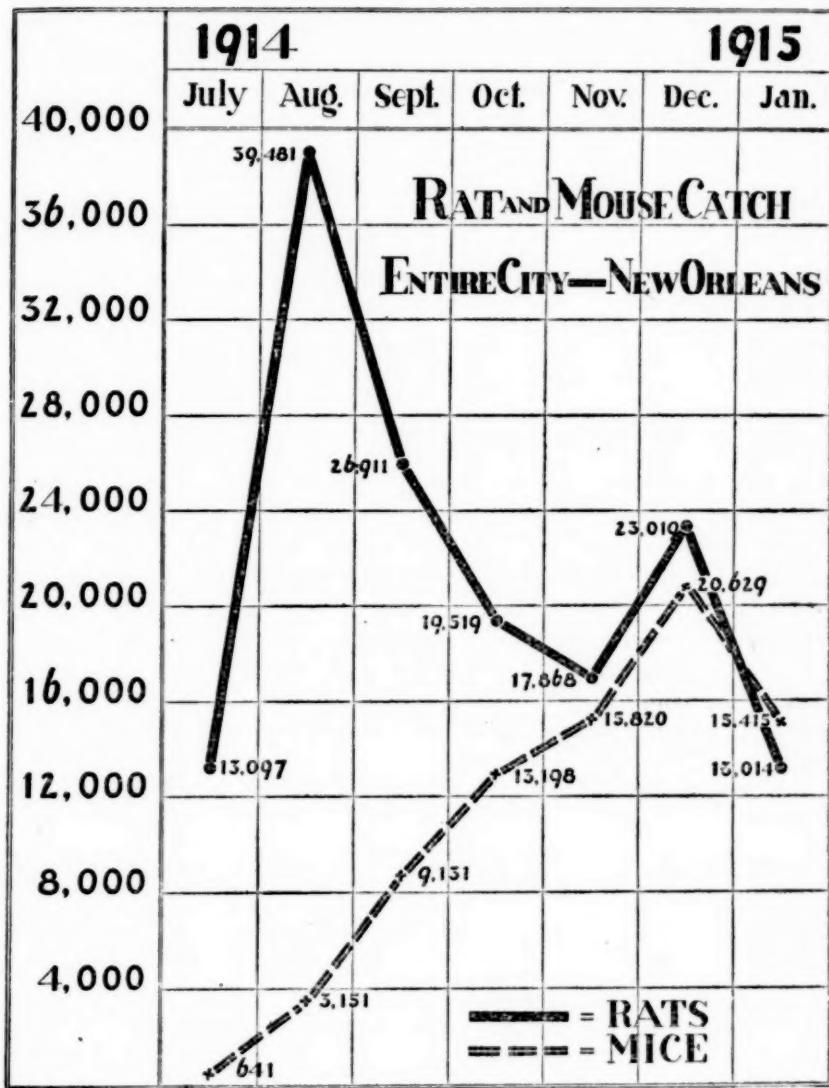
It will be noted that particular emphasis has been laid upon the exclusion and starvation of rats. These are the all-important measures. Poisoning, if carefully done, is of value in reducing the rodent population, but without starvation it is not apt to be particularly effective. Perhaps the best agent for poisoning rats is

phosphorus. It is usually incorporated in a paste of glucose and starch. Glucose reduces to the minimum the liability of the mixture to spontaneous combustion. Arsenic in a menstruum of lard may also be used. Rat poison is usually put out on small pieces of bread, care being taken to cover all the sides of the morsel. Care should also be exercised to see to it that no poison is placed where it may be taken by children or domestic animals.

Another valuable agent in diminishing the number of rats is trapping. This has a twofold purpose. It was found at San Francisco and New Orleans that the number of female rats is generally in excess of the number of male rats and that a certain proportion of the female rats contained unborn rats when captured. This in itself effects a reduction in the number of rodents and it should not be forgotten that even though the female rats may contain no young they are nevertheless the potential mothers of a considerable number of rodents. Intensive trapping reduces the number of rats considerably and one of the best gauges of this reduction is the relation between the number of captured rats and mice. The trapping of mice is accidental and not intentional, the mice taken being a mere by-product of rat catching. The rat is the fiercest enemy of the mouse, and when rats are plentiful mice are very careful not to roam abroad. From this it might be deduced that as the rat population diminished the mice would be able to move about with greater freedom and would therefore be more apt to be taken in traps. Such is actually the case. For example, in July when the anti-plague campaign began in New Orleans, the percentage of mice caught was 4.66; in August it was 7.39; in September, 25.33; in October, 40.34; in November, 46.96; in December, 47.26; while in January it was 54.22. Conversely, the percentage of rats fell from 95.33 per cent in July, to 45.77 per cent in January.

If to trapping is added the laboratory examination of the captured rodents, a second purpose is accomplished. If a considerable number of rats are taken from all portions of a city and subjected to careful laboratory examination it is possible to determine whether or not they are plague infected, and should any prove so, to take those measures which will prevent plague among rats from spreading to human beings. This is most important. No seaport in the United States can truthfully say that it has no plague until it has made a careful survey of its rodent population. It is not enough that a few hundred rats should be sent to the laboratory. It is necessary that thousands be captured and carefully examined by a bacteriologist skilled in the diagnosis of rodent plague. Neither is it sufficient to assume that because rodent plague was not discovered this month, or this year, it may not exist in some future time, and it therefore becomes

the duty of municipalities to appropriate sufficient money to permit their public health departments to continuously trap and examine rats. The rule heretofore has been for municipalities to put this off



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until the presence of human plague makes it absolutely necessary to inquire into the prevalence of rodent plague.

If there is anything at all in the doctrine of preventive medicine, it should be applied to the prevention of disease rather than to its

eradication after the epidemic has gained a serious headway. Plague has already appeared in three cities in the continental United States. It exists in many of the countries with which we have intimate trade relations. It is a disease which disregards climate and geographical location, and merely because its presence has not been discovered in other American seaports is no guarantee whatsoever that it does not exist there among rats at the present time. Plague is a menace to every port on the American seaboard, and with the growth of our foreign commerce this menace is daily increasing. Nothing short of serious interference with commercial relations will prevent its gaining a foothold in American ports unless the municipal authorities of these ports themselves will take cognizance of the danger which confronts them and apply plague-preventive measures before it has become necessary to put plague-eradicative measures into operation. The eradication of plague is both difficult and costly. The prevention of plague is relatively simple and inexpensive. The policy of waiting until human plague has appeared is gambling with human lives and prosperity. The policy of plague protection is health and commercial insurance. Plague has spread around the world. It menaces every port in the United States. This menace will come to naught if we will erect the proper fortifications against plague and take those measures for its prevention while the opportunity lasts.

MORBIDITY REPORTS IN KANSAS.

The following is from a letter sent by the Kansas State Department of Health to all local health officers for the purpose of obtaining their interested cooperation:

STATE OF KANSAS,
STATE BOARD OF HEALTH,
Topeka, April 2, 1915.

To Health Officers:

Morbidity reports are to be mailed each Saturday night. If no reports are received from physicians during week, you are expected to mail us a "No report" card instead. If by the following Wednesday we do not receive either the reports or a "No report" card, you are marked "Delinquent." We are keeping careful check of delinquencies for this year, and we hope to encourage regularity of reports by apprising health officers of their records at the end of each quarter.

For the past quarter—that is, weeks from January 2 to March 27, inclusive—we should have had 12 weekly reports from you. For each week you missed we deducted $8\frac{1}{2}$ per cent from your score. This list will show you where you stand:

COUNTIES.

Bourbon, Brown, Butler, Clark, Clay, Cloud, Graham, Harper, Haskell, Kiowa, Leavenworth, Lincoln, Marion, Miami, Mitchell, Montgomery, Nemaha, Ness, Osage, Ottawa, Riley, Sedgwick, Sherman, Smith, Sumner, Woodson.....	Per cent.	100
Allen, Barton, Chase, Cherokee, Cheyenne, Comanche, Cowley, Doniphan, Douglas, Elk, Ford, Geary, Gove, Hamilton, Jefferson, Kingman, Lane, Lyon, Neosho, Norton, Rawlins, Wallace, Wilson.....		91 $\frac{1}{2}$

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	Per cent.
Anderson, Chautauqua, Coffey, Crawford, Ellis, Ellsworth, Franklin, Jackson, McPherson, Morris, Osborne, Pottawatomie, Republic, Scott, Shawnee, Trego.	81 $\frac{1}{2}$
Greenwood, Hodgeman, Kearney, Labette, Meade, Morton, Seward, Thomas, Washington.	75
Gray, Linn, Pawnee, Reno, Rice, Wabaunsee, Wyandotte.	66 $\frac{1}{2}$
Jewell.	58 $\frac{1}{2}$
Decatur, Johnson, Wichita.	50
Barber, Edwards, Phillips, Russell, Stevens.	41 $\frac{1}{2}$
Dickinson, Grant, Greeley, Harvey, Logan, Marshall, Saline.	33 $\frac{1}{2}$
Pratt, Rush.	25
Finney, Rooks, Sheridan.	12 $\frac{1}{2}$
Atchison, Stafford.	8 $\frac{1}{2}$
Stanton.	0

CITIES.

Parsons, Coffeyville, Hutchinson, Wichita, Topeka.	100
Leavenworth.	91 $\frac{1}{2}$
Fort Scott.	83 $\frac{1}{2}$
Kansas City.	75
Pittsburg.	50
Atchison.	8 $\frac{1}{2}$

* * * * *

Fraternally, yours,

JOHN J. SIPPY, M. D.,
Epidemiologist.

INTERSTATE MIGRATION OF TUBERCULOUS PERSONS.

ITS BEARING ON THE PUBLIC HEALTH, WITH SPECIAL REFERENCE TO THE STATES OF TEXAS AND NEW MEXICO.¹

By ERNEST A. SWEET, Passed Assistant Surgeon, United States Public Health Service.

The Effects of Travel Upon Tuberculous Persons.

We have seen the possible sources of danger to the public in the migration of the tuberculous. Attention must now be directed to the consequences to the consumptives themselves in their efforts to obtain relief. The journey from East to West, while performed in these days in a greater degree of comfort than in former years, is particularly depressing to those in an advanced stage of the disease, and there are few who arrive at their destination in as good condition physically as they were upon departure. At times the deterioration is marked, the journey itself apparently being the element which has brought about rapid progression of the disease and perhaps a change in the entire aspect of the case.

Consumptives do not bear close confinement, and when such confinement is accompanied by exposure to dust, overheating, lack of rest and food, and the depression which results from parting with friends,

¹ This is the second installment of this article. The first installment appeared in the Public Health Reports of April 9, 1915, page 1059.

the results are particularly bad. Incipient afebrile cases are quite apt to exhibit fever upon arrival, and those which are moderately febrile will have a greater degree of temperature. Inhalation of dust invariably aggravates the cough and râles are more noticeable, so that the determination of the exact pulmonary condition must be postponed for several days. Lack of rest has a pronounced effect, especially if the journey is attempted in a day coach, and loss of weight is almost sure to result.

The effects of altitude should be considered in all far advanced cases, or those complicated with valvular, myocardial, or nephritic lesions, as several of the transcontinental roads reach a height beyond 6,000 feet. It is not unusual to observe cases arriving at western resorts with cyanosed lips and fingers, rapid respiration, galloping heart, and evidence of circulatory failure—cases, too, which from the pulmonary standpoint seemed favorable for prolongation of life. Many of those who die upon trains or shortly after arrival are of this type. It is always well for the physicians to give careful advice as to exercise to such patients, as well as to every other far-advanced patient, and relatives should accompany whenever possible.

The forwarding of patients to the various Government sanatoria has afforded excellent opportunity for observations regarding the effects of travel upon tuberculous persons, and it has been the rule at the United States Public Health Sanatorium for many years to return to the hospital from which the patient was received a transcript of the physical findings. Allowing in each instance for the personal factor which enters into a chest examination but does not affect the findings as to pulse, temperature, weight, etc., the conclusion must be reached that practically every patient who has traveled a considerable distance is worse upon his arrival than upon his departure. Physicians and others should, therefore, exercise caution in advising a change of residence, and do so only after a most careful physical examination in which every determinable factor is considered. If other considerations are equal, a resort which is easily accessible to the patient should be selected, and not one far distant from his home. Such a place also has the advantage that if it proves unsatisfactory in any respect a change is more readily made.

The Status of Health Seekers Upon Arrival.

The reception accorded health seekers upon their arrival varies with the stage of the disease, their financial status, and the locality visited. While no single description will suffice for all communities, some remarks are necessary in order that we may properly understand the attitude of the public toward the consumptive. It must be remembered that the statements made are general, and that they do not apply to all the resort cities nor include all health seekers.

Within recent years a spirit of antagonism has developed toward the tuberculous in many western cities. This antagonism manifests itself in widely different ways; it is much more pronounced in certain communities than in others, and there are many reasons for its existence. It is impossible to enumerate all the causes of this strong undertone of feeling which prevails and is so often apparent, and at times disheartening, to the health seeker, but a few of the factors may be mentioned.

In the first place, the character of the West is changing. The majority of the towns and cities have become independent—that is, the surrounding country has developed, and they have increased in population and resources. The inhabitants are enumerated with perhaps as much zeal as in former days, the health seeker being of material assistance in the computation; but with the influx of the well he has to a certain extent been crowded out, his existence becoming more parasitic. At the same time, he has lost his inoffensiveness, and in the public eye he is potentially, if not actually, harmful.

Secondly, a pronounced phthisiophobia has developed throughout the land, the West as well as the East. This fear of the disease is a natural outgrowth of our teaching, and it is not surprising that extreme views regarding its communicability have in some instances developed. We have been years in instructing the public regarding the dangers of tuberculosis, and who can say that they have not been well taught? We now find it necessary to modify our views; to state that if anything we have underestimated the dangers of infection in children and perhaps overestimated it in adults, and that our safety lies not so much in attempting the isolation of the ubiquitous consumptive as in the development of our racial and individual resistance through every possible means. Naturally the instruction of the public along these lines may lead to further misunderstandings, and it is a problem how the question should be approached. However, this is for the future to decide. The fact remains that the prevalent notion of the disease is that it develops in some manner from taking the bacillus into the system, that contact with a consumptive is necessary to obtain the germ, and that once it invades the body disastrous consequences are bound to occur. Under such circumstances can we blame the public for exhibiting a degree of fear?

A third reason is that consumptives have made themselves objectionable. This statement does not by any means apply to all, but it does refer to that large percentage who are careless in their habits and regardless of the welfare of the people at large. Such invalids are discriminated against, but they have brought the discrimination upon themselves. No other disease is more easily diagnosed by the

lacity; hence every aggregation of consumptives is noticeable. Their gathering in the public parks and plazas, their mingling with the well in theaters and in street cars and other vehicles, at the same time violating the laws of decency and health, could have but one result—their partial ostracization. No city can be blamed for any discrimination made upon such a basis as this, although it is unfortunate that the innocent are obliged to suffer for the offenses of others.

A number of the well-known resorts for the tuberculous have also become popular tourist centers, and the feeling has developed that the two classes of residents are more or less incompatible, the presence of the tuberculous acting as a deterrent to the more desirable tourist element. The history of many of our large tourist centers does not altogether bear out this belief. Saranac has become both a summer and winter resort for the well, though the virtues of the place were first revealed by the invalid class. Likewise Asheville, Denver, San Antonio, Colorado Springs, Los Angeles, and San Diego retain at least a portion of their popularity in spite of the presence of consumptives. The argument is made, however, that if these people had been debarred, both the popularity and growth of such cities would have been greater, and to this contention no adequate reply can be made, it being a matter incapable of proof.

The appearance of indigent and far-advanced consumptives in large numbers is still another reason why western communities have rebelled. Cities are for the most part willing that those with means at their disposal should share the benefits of their climate, but they must necessarily discourage those who are unable to care for themselves. This class has become an economic burden, the extent of which we shall refer to later, and rather than care for the sick poor of other cities the towns have decided that it is preferable to discourage altogether the influx of invalids. The far-advanced consumptives are likewise objectionable, those who present no appearance of invalidism being placed in an entirely different category from those who exhibit every evidence of the ravages of the disease.

In attempting to explain the attitude of communities toward the consumptive we may describe conditions as they exist in a typical resort. For this reason the town of X is chosen, a beautiful village situated in the mountains, but within easy access to one of the large resort cities. The town is the center of an immense grazing country. The people are hospitable and kind, showing the stranger in their midst every attention and courtesy, provided he presents a healthy appearance. The town has been for many years a popular health resort, and fully 50 per cent of the families were originally health seekers. It has never suffered from an influx of indigents, although the residents assert that some few have been shipped in from a neighboring city, but whenever this has occurred a subscription

paper has been passed and they have promptly been returned at a minimum expense, so that the town has never had any tuberculous poor. The village is visited in summer by several hundred people; otherwise it goes on in the even tenor of its way, a model American community in many respects.

In 1911 a bill was introduced in the legislature by the representative from this district for the establishment of a State sanatorium for tuberculosis. The bill became a law, but the very man who introduced it strenuously objected to the erection of the institution in his home town. A meeting was called, the project was overwhelmingly voted down, and the people went on record as not desiring the institution in their midst, or any further increase in the tuberculous population.

Before this it had been customary for many consumptives to migrate in wagons from place to place, camping here and there along the streams, and spending the entire summer season entirely out of doors, a favorite camping site being just below but within easy walking distance of the village. These people were not particularly offensive, although they seldom left their camp sites in as good condition as they should, but it was felt that the town would be better off without them. For the sole purpose, therefore, of eliminating these nomadic consumptives, the city passed an ordinance prohibiting the erection of any tent within the corporate limits, a district a mile in width and 2 miles in length.

The accommodations for invalids are strictly limited and great difficulty is encountered in finding either board or lodging. One day a stranger collapsed in the street, but there was not a place in town where he could be cared for except the back room of a doctor's office, where he remained for two days until he had partially regained his strength, when he was shipped out of town. A well-equipped hospital in the village refuses to admit the tuberculous under any circumstances. In the office of the leading hotel is a notice reading "Positively no regular boarders taken without a certificate from a doctor stating that they have no tuberculosis," well exemplifying the spirit of the town toward the invalid class.

Here, then, is a village, inhabited by as considerate a people as one would wish to meet, a large part of whom were originally health seekers, and therefore presumably favorably inclined toward their brother victims, with never any tuberculosis developing in their midst, and yet not only unfriendly, but decidedly antagonistic, toward the consumptive. This is not an exceptional instance by any means, and the facts cited can be applied without modification to many western towns, barring the instance of the hotel keeper's notice, which is novel—so novel in fact that the host desires credit for the innovation.

The reasons for such an attitude are not far to seek. From an economic standpoint it is the general belief that the community would be better off without the invalid class; that for reasons of health the citizens prefer to have them elsewhere, and, chiefly, that the absence of all such is necessary to rid the community of the objectionable few.

The inference must not be drawn that all western communities are of this character, but it is safe to conclude that an element of such feeling exists in all. Many of the towns have taken quite the opposite view, welcoming the invalid, and even in their literature lauding the desirable qualities of their atmosphere. Such places are the ones to which health seekers should resort, the sympathy extended being of advantage, the accommodations superior, and the lessened amount of prejudice often enabling those who are able, to secure employment. Unfortunately many of these place are shunned by the afflicted, although the climatic advantages may be the same or even better, there being a great tendency to flock to the cities. All other considerations being equal the smaller towns are much more to be desired and the movement cityward is to be deprecated. The suggestion has been offered that a list of those places which extend a welcome to invalids and those whose attitude is antagonistic should be given, in order that a proper selection may be made, but truly the compiler would need to have more courage than judgment in aligning the resorts.

Facilities Available for the Reception of Invalids.

The most important consideration upon arrival is the securing of proper accommodations, a process more tiresome, perhaps, than the trip itself, and necessarily undertaken at the very time when the invalid, in order to accustom himself to the changed conditions, should have absolute rest. Extremely few arrivals have previously made arrangements for institutional care, and these are fortunate. A small portion of the remainder are destined to relatives or friends or have definite accommodations in view, but the large majority are without knowledge of where to go. Hotels, boarding and lodging houses, hospitals, and sanatoria, public and private, are possible places of refuge.

Hotels are semipublic institutions managed for personal profit, and therefore catering to the wishes of the public at large. Those who patronize these places make certain demands, and if the management is keen, such demands are complied with, whether it be new cooks in the kitchen or tango teas on Saturday afternoons. The traveling and tourist trade has ordered in no uncertain terms that hotels should no longer continue to harbor guests afflicted with a communicable disease, and whenever this order has not been re-

sponded to, loss of patronage has ensued. This, in brief, is the landlord's side of the question.

When a consumptive arrives at a resort town and hastens to a hotel, only to be informed by the discriminating clerk that no accommodations are available, his surprise is apt to be manifested. After withholding or expressing, as the case may be, his opinion of the management, he directs his steps across the street, only to meet with a second rebuff, and at length he either accepts the comforts of a third-rate hotel or, after continued search, is able to obtain lodgings; or, having once passed muster, he finds that a more discerning clerk appears, or that another guest has complained of his presence, and he is politely informed that his room must be vacated. Either of these two humiliating experiences are common enough occurrences in resort towns, and they may occur to any person who presents an appearance of invalidism.

It is useless to deprecate such occurrences as long as public sentiment remains unchanged. The sick should realize that their presence is objectionable to a large number of people, and act accordingly. It is not because hotel managers fear for the health of their guests that such measures are adopted, for in all probability the clerk, if not the cook, as well as a dozen other employees, are themselves tuberculous, but as long as recognition of this fact is not made no trouble arises.

What has been said regarding hotels applies in every respect to boarding and lodging houses as well. There are two classes of such in the health belt—those which do not accept the tuberculous and those which do, the latter being extremely difficult to locate. Entrance to the former may be gained surreptitiously, and it is not to be supposed that they do not contain a fair share of invalids. A roster of these people shows afflictions as diverse as those of any hospital ward; some have "rheumatism," others "nervous trouble," and perhaps a few "hay fever," yet they all cough. Very often the proprietress is a party to this deception, but if so, one may be sure that she makes weekly collections for her ability as a diagnostician.

Moderately or far advanced cases are as a rule not received except in houses catering to this class. In some cities it is almost impossible to find accommodations, as even the cheapest lodging houses claim to reject invalids, although they are usually crowded with them—a direct result of the elimination of the tuberculous from better residences, an important fact from a health standpoint. Complaints have been made that people who are able and willing to pay are often unable to find accommodations and are forced to walk the streets or to appeal for aid to physicians or charitable institutions. Prospective health seekers should be made acquainted with these facts and warned that arrangements for their care before arrival are

essential and should be made previous to departure. Unless this is done, patients are almost sure to meet with difficulties and embarrassments.

In going through the Southwest one is struck by the great dearth of free clinics and public hospitals, but when it is realized that the country is thinly settled and comparatively new, and that endowments are almost unheard of, this can be easily understood. There has also been a remarkable growth of the private at the expense of the public institution, and these are conducted for profit, so that hospitals with eleemosynary features are rare and accommodations for the poor, or even people in moderate circumstances, are lacking.

Recognizing the great need of institutions of this character the Texas Public Health Association has carried on a most energetic campaign during the last few years for the establishment of facilities for caring for the sick, and this work has not been without fruit. A bill, which was enacted into law largely through the efforts of this society, provides that upon application of 10 per cent of the qualified voters of a county the commissioners' court may at a special or regular election submit to the property tax paying voters of the county the proposition of issuing bonds for the establishing or enlarging of hospitals and the acquiring of property therefor. This enactment also provides for dispensaries and clinics, and the employment of visiting nurses in connection therewith. The law is one which may well serve as a model for other States, and is an illustration of what an efficient organization, with a capable secretary at its head, may accomplish.

The complications of tuberculosis are numerous and varied, so that in whatever condition one may be he should have in mind when selecting a resort the facilities available should difficulties arise. It is not enough to know that a hospital exists, but it should be determined whether or not it is open to the reception of the tuberculous and at what rates.

Curiously, the same reluctance to receive consumptives manifested by hotels and boarding houses is apparent in hospitals. The majority of privately owned institutions, unless of course they are conducted for that purpose, absolutely refuse admission to such cases. It is not improbable that many are admitted, especially through physicians or influential friends. In fact, the information furnished by the management does not always coincide with that gleaned from death certificates; nevertheless it is the rule in better managed institutions that consumptives shall be debarred. The hospitals contend that a case of tuberculosis is in the same category as one of scarlet fever or diphtheria, that other patients object to the presence of such cases, that they are more disturbing, require better food and attention, and that nurses are more reluctant to care for them. Therefore it is

necessary either to increase the rates or to refuse them admission altogether, and the second course is usually pursued.

One of the great disadvantages of treatment in the smaller towns is the absence of hospital beds, there being practically none outside of the limited number of sanatoria. In the cities the proportion of beds to patients is far below what it should be. At El Paso, with at least 4,000 invalids, there are less than 120 beds, and the rates are such that people in moderate circumstances can ill afford their comforts. Albuquerque has approximately 115 beds. San Antonio has accommodations for fewer than 100 patients, and 30 of these are at the county poor farm, the large hospitals of the city absolutely refusing to care for the tuberculous, and there being but one sanatorium. In 1909 an ordinance was passed in this city prohibiting the establishment within the corporate limits "of any sanatorium, hospital, or institution of any kind or character, for the reception of, care, cure, or treatment of persons suffering from or afflicted with pulmonary or other character of tuberculosis," and this enactment enhanced the value of the only institution already erected so much that it sold for many thousands of dollars above its true worth.

If the hospitals show a reluctance in admitting the tuberculous, the tuberculous manifest a far greater reluctance in seeking the hospitals. Unlike other diseases, sufferers from which require at the most but a few weeks of institutional treatment, tuberculosis is one which necessitates even months of treatment, and the financial condition of patients is often such that they can not afford this expenditure. The majority, too, when they seek climatic benefit neglect to avail themselves of every other means of cure, one of the gravest errors the consumptive makes: hence we find that whenever admission to hospitals is sought, such patients are apt to be critically ill, or suffering from some complication, surgical or otherwise. Eliminating those who enter institutions when unable further to care for themselves, the percentage of invalids who have proper hospital treatment is not large, certainly not over four or five per cent.

In proportion to the infected population the number of sanatoria in the two States is small, but it is quite certain that if there were a demand for more their erection would follow. Sufferers who do not seek climatic change usually realize the necessity of institutional treatment, but health seekers are quite the opposite, apparently believing that climate, and climate alone, is sufficient to cure. As a result, special institutions for the treatment of the disease are not as common as one would expect.

The great advantages of sanatoria are their educational influence. Here the patient learns the value of fresh air and how to obtain it; the true meaning of rest in a medical sense is appreciated for the first time, as well as the proper interpretation of every symptom and the

requirements necessary to effect a cure. It is true that patients outside the sanatoria obtain in time a knowledge of the fundamentals, but this is chiefly the result of experience, and experience is an expensive teacher in tuberculosis.

No disease requires such close attention to detail and careful discrimination for its successful treatment as does tuberculosis, but the public has yet to learn this fact. It is the little things which count, the trivial affairs of every-day life which have such an important bearing upon recovery. The sanatorium is the place where every detail is accorded its true worth, where nothing is too commonplace to be investigated, and where all that is obscure is delved into. The sole object of being there—recovery—is ever before the patient, and the stimulus of observing others similarly afflicted on the journey to health is an additional factor for good. Given a sufferer who has only sufficient funds for a brief period in the health belt, it is far better for him to cut that period in half, entering a well-equipped institution.

One disadvantage of the sanatorium is, of course, the expense. Relatively few health seekers are prepared to pay month after month the amount required for such treatment, although this is not sufficient explanation for the presence of consumptives about hotels and lodging houses, where the expense is even greater than in institutions. The sanatorium life becomes tiresome and monotonous, the irksomeness palls, and patients long to be free. Therefore it is difficult to hold the very ones for whom the most can be done.

Next to the sanatorium the home offers the best facilities for the cure of the disease, and the number who have adopted this means in the Southwest, having temporarily or permanently taken up their residence in that section, is surprisingly large. Practically all the comforts to which the patient has been accustomed are at hand. The food is of the same character, prepared according to his likes; the petty annoyances are largely absent, and the patient is independent—a desirable feature, if not abused. Nostalgia, a depressant the importance of which we sometimes forget, is relieved, and the invalid becomes as contented as it is possible for a consumptive to become. If the patient's home life has been preceded by several months of sanatorium experience, or if he is under the watchful eye of a careful physician who has secured the cooperation of the family, a most satisfactory state of affairs exists, and one which augurs well for recovery.

The Financial Status of Patients Upon Arrival.

The curability of tuberculosis is in direct proportion to two factors, namely, the intelligence of the individual and his financial status. The importance of poverty as a causative factor is well understood,

but it bears as definite a relation to recovery as it does to cause. Tuberculosis is the poor man's affliction, the great scourge which follows close on the heels of poverty and dooms whomsoever it claims. There are but two staying hands—intelligence and riches—and if neither is possessed, the grim reaper but adds another to his list.

Poverty is the element which adds a touch of sadness to this immense movement westward. The hopelessness of such a movement can never be lost sight of by the keen observer, but financial stress brings into sharper relief its uselessness. A large proportion of those who arrive are totally unprepared to cope with the reverses with which they are sure to meet. What chance has a consumptive who for his recovery requires fresh air, nourishing food, and rest—three purchasable commodities—when he has not the funds with which to secure them? He does not acquire fresh air because his means force him into unfit lodging houses or poorly ventilated bedrooms, he can not buy nourishing food in cheap restaurants, and rest is unobtainable when he is obliged to work in order to exist. Why should he have come, then, under these circumstances? In truth, there is no good reason for his coming.

The hope of employment brings many. They are aware that their means are insufficient, and that after arrival they will have but a few dollars left, but they expect to find work. They have learned nothing of the fact that a dozen consumptives, and half as many others, are already on the scene, each ready to grasp whatever offers, and that industrial conditions in the West are quite dissimilar to those of the East. With but a faint conception of what their expenses will be, and no inkling whatever of the prejudice which exists, they journey forth, only to find that the possibilities are far different from what they seemed.

Others are sent. It has become a common practice for lodges, labor unions, secret societies, churches, and benevolent organizations to forward their tuberculous members to some western resort, and if one is so improvident as not to belong to something of this class and yet is considered worthy the neighbors will doubtless subscribe to a fund, purchase a ticket, and end their responsibility in this manner, the patient arriving at his destination with practically nothing and hopelessly ill. Is it not reasonable to expect that people who are unable to provide for themselves at home will be far more so in a district where they are friendless, where employment is limited, and where the favorable qualities of the individual are not recognized? And what is more natural for one who accepts aid upon his departure than to expect aid upon his arrival? People of this class almost immediately become a burden either upon their lodge, organization, or the public.

During the winter season the Southwest, Florida, California, and other sections are overrun by a large floating population, many of whom are tuberculous. These people are as migratory as the birds, and their number greatly exceeds what is commonly supposed. They may not be tramps in the ordinary sense, but they are nomadic, going from place to place and never satisfied with what they receive. They work when work is obtainable, fill the missions and other relief organizations when necessity requires, and are a somewhat undesirable class, being usually without funds. An exceedingly large proportion of those to whom charity is dispensed are of this class.

Still others come with the idea that the family at home will supply their wants. This the family does, but as the weeks and months go by the financial assistance is apt to diminish, until finally the absent member is thrown entirely on his own resources. Or the health seeker may have been able to care for himself, in some cases for years, but as the disease progresses physical labor becomes impossible or the employer is forced to obtain other help, and the means of livelihood is lost. Among the others some reach the verge of poverty through desertion, improvidence, lack of foresight, or death of relatives or friends. The great cause of destitution, however, is in patients leaving their homes poorly prepared, with no conception of the amount necessary to sustain them, well provided with hope but not with funds. What if their pocketbooks are flat, are they not journeying toward health, and who would expect that the road would be other than rough and troublesome?

The extent of destitution among health seekers can not be definitely gauged, but this aspect of the problem has been dwelt upon so extensively and the protests have become so vehement, while at the same time so few facts and figures have been recorded, that some effort must be made to determine as closely as possible how much of a burden these people have become; besides, from a public-health standpoint the indigents and semi-indigents are the most dangerous classes. In every town visited, therefore, public officials were interviewed, records inspected, and charity and relief organizations communicated with in order to ascertain these points, realizing that this, together with the dangers to health, are the chief reasons for objections being raised to the presence of consumptives in those districts.

To begin with, we must recognize two forms of relief—that furnished for the most part by organized charity and the public to those who are partially destitute and that provided by city or county authorities and hospitals to those who are wholly indigent.

The amount of aid dispensed by individuals can scarcely be overestimated. Restaurants provide meals, business men subscribe to papers, physicians give medical aid, friends furnish transportation, and neighbors minister to many a sufferer. Churches are called upon for assistance, labor unions and secret societies support members of

other lodges, and there is hardly a citizen who is not appealed to. Members of lodges in the East will arrive in the resort towns with cards to the local lodge, which is obliged to interest itself in their welfare. Oftentimes these people will not be altogether without funds, being able to pay perhaps a dollar a day for maintenance, but when care is not obtainable for less than twice that amount they are still in a predicament. The majority, of course, make every attempt to live on the lesser sum and thereby sacrifice every opportunity for recovery. The relief furnished in this manner varies with the community. Some towns have had such a flood of sufferers that they have become unsympathetic, nay even heartless, and rigidly turn away every applicant, while others still minister to the stranger within their gates as if he were one of their own. As a rule, the smaller villages not on the routes of travel are the most cordial, doubtless because they are less often called upon for aid, and the larger cities least so. Individuals also differ in their responsiveness, but in most instances they do far more than could reasonably be expected of them, and many a poor consumptive has some stranger to thank for succor and relief. Taken as a whole, the Southwest has exhibited a degree of charitableness and sympathy for these helpless strangers unsurpassed, and no tribute to their benevolence and generosity can be wholly adequate.

The second form of relief, that dispensed through public charity, is more readily ascertainable and serves better as an indicator of destitution among health seekers, but even here we must guard our conclusions. We have seen that there is a great lack of hospitals and other eleemosynary institutions for the care of the afflicted, and those which are available are totally unable to accommodate the great number of applicants. Private hospitals supplant to a large extent public institutions, and naturally the charity which they dispense is limited and the relief furnished in the way of free-clinic and out-patient departments greatly restricted. For these reasons, then, the figures given of the respective cities are not to be considered as definitely determining the amount of indigency or the extent of the problem, for hundreds have doubtless been turned away unaided; they merely measure what each community has accomplished and what proportion of the burden, so far as their records indicate, rightfully belongs to them. It should be recalled that we are viewing the entire question from an interstate standpoint.

While some uncertainty may be felt as to the cordiality of the welcome extended to the ordinary sufferer, the indigent consumptive can be quite sure that no outstretched hand will greet him upon his arrival, and that his presence is neither expected nor desired. It is not alone because he is a sufferer from tuberculosis that he is unwelcome, but because he is a pauper as well. Whether the disease is

responsible for his pauperism or not is immaterial, the fact of his being a pauper and coming from another community is enough to condemn him.

It is the prevailing opinion among city and county officials, charity workers, and others that this section has been made the dumping ground for the tuberculous poor of other States, and that various organizations and communities transfer to this region their indigent cases in order to be rid of an undesirable class. The matter finally became of such importance that the press was appealed to, and notices were sent throughout the country informing the public of the exact state of affairs—that accommodations were limited, that opportunities for lucrative employment were few, and that no cases should be forwarded to this section unless the patients were supplied with funds sufficient at least to provide care for one year. At about the same time it was heralded that the State of Texas contemplated instituting quarantine procedures for the protection of the health of her people primarily, but secondarily to prevent the importation of an invalid pauper element. Neither of these measures afforded relief. The agitation continuing, finally, following a call issued by the Governor of Texas, a conference was held at Waco, attended by delegates from Kansas, Utah, Colorado, Oklahoma, New Mexico, Arizona, and Texas, for further discussion of the subject. The conference ended with the adoption of the following resolutions and the appointment of a committee of 99 to further the propaganda:

Whereas, for many years consumptives have been coming to the Southwestern States because of the superior advantages of climate for the treatment of this disease; and
Whereas the majority of such persons are financially unable to maintain themselves for a period of time sufficient to restore them to health and become self-supporting; and

Whereas there are not a sufficient number of State, county, and city hospitals in the Southwest to maintain the large number of persons from other States who apply for free treatment, and the public charitable organizations of the Southwest can not care for all such applicants; and

Whereas the States, counties, and cities from which these people come and where they contracted their disease have not aided and will not aid them; and

Whereas the people of the Southwest are becoming infected with tuberculosis, spread by the careless and ignorant consumptive strangers, notwithstanding the fact that natural conditions are unfavorable to the development of tuberculosis: Therefore we, the delegates to the Southwestern Conference on Tuberculosis, hereby

Declare, That the care of consumptives in the Southwest is an interstate problem, and that it is the duty of the Federal Government to take action to provide hospital care for citizens suffering from consumption who have left their native States and are residing in the Southwest seeking health, and who are unable to pay for hospital care.

The Number of Indigent Consumptives.

The actual number of indigent consumptives in the State of Texas can not, of course, be accurately determined, but the records of the two chief resorts, San Antonio and El Paso, are fairly complete and

will be given in turn, together with the approximate expense to each community.

The following table represents the total number of indigents cared for in San Antonio for the four-year period ending December 31, 1913, together with the birthplace of each. In approximately one-quarter of these cases some one had the intelligence to record the birthplace as "American." They are therefore tabulated as coming from other States, though doubtless a few of them were Texas born.

TABLE 10.—*Consumptive paupers, city of San Antonio, in 4-year period.*

Texas (15 per cent).....	46
Other States (46 per cent).....	199
Foreign (13 per cent).....	56
Mexico (23 per cent).....	100
Unknown (2 per cent).....	9
Total.....	428

As will be seen, there were treated during this period 428 cases, an average of 107 yearly, but this number includes not only those who came to the city as health seekers, but the city's own tuberculous as well. Of the total number, 64, or 15 per cent, were Texas born, 46 per cent came from other States, 13 per cent were of foreign birth, 23 per cent were born in Mexico, and the remaining 2 per cent were of unknown origin. Considering those born in Texas and those originating in Mexico as belonging to the State, we have as remaining 62 per cent who are clearly indigent interstate migrants. This percentage is but a trifle higher than that of the interstate migrants obtained from the death records, 52 per cent, the increase being accounted for by the error previously mentioned. As far as this city, then, is concerned it does not appear that the percentage of those from other States who have become public charges exceeds those from similar sections who came properly provided with funds, as would be the case had they been shipped in to any extent from across interstate lines. Of the indigents which San Antonio has cared for, at least 38 per cent, and probably many more, are a proper charge upon the city.

Certain facts can also be determined by the length of residence in the State of all public charges. In the following table the native Texans are excluded, which leaves 364 to be accounted for.

TABLE 11.—*Length of residence in the State of indigent consumptives, city of San Antonio, Texans excluded.*

Under 30 days (10.4 per cent).....	38
30 days to 6 months (15.3 per cent).....	56
6 to 12 months (9.3 per cent).....	34
1 to 2 years (8.8 per cent).....	32
2 to 5 years (16.2 per cent).....	59
5 to 10 years (11.8 per cent).....	43
10 to 15 years (7.4 per cent).....	27
15 to 20 years (4.4 per cent).....	16

Over 20 years (10.2 per cent).....	37
Unknown (6.2 per cent).....	22
Tuberculosis deaths.....	364

Of those not born in Texas, 10.4 per cent had been in the State less than 30 days, 15.3 per cent between 30 days and 6 months, 9.3 per cent between 6 months and 1 year, 8.8 per cent between 1 and 2 years, 16.2 per cent between 2 and 5 years, 11.8 per cent between 5 and 10 years, 7.4 per cent from 10 to 15 years, 4.4 per cent from 15 to 20 years, and 10.2 per cent over 20 years, the length of residence of the remaining 6.2 per cent not being stated. In other words, 50 per cent of all indigents not born in Texas had a residence in the State for over 2 years, while practically 34 per cent had resided in the State for a greater period than 5 years. Therefore of the 428 cases treated during the four-year period, 57.4 per cent were either born in the State or had lived there for a longer period than 2 years. This leaves 182 patients who were clearly outsiders cared for in 4 years, an average of but 46 a year. When it is considered that during that time the city harbored a great many thousand consumptives, at least 4,000 a year, we must conclude that she either refuses to care for transients, that she is unable to relieve them, or that the number applying for aid is not as large as has been contended.

Indigent cases in this city are cared for at the county and city hospitals, the latter receiving only emergency cases and those requiring surgical procedures, so that it is possible to closely approximate the expense of their treatment. The average cost of care, ration, treatment, etc., at the city hospital is 76.5 cents per day, and during the four-year period there were 2,170 hospital days, aggregating \$1,660, or \$465 annually. There were during this time 27 deaths, the expense of burial being \$15 each. A liberal estimate of the annual expense would not be over \$600. The county hospital is a branch of the county poor farm, with 130 patients, 39 of whom are consumptives. The cost of maintenance is now \$14,000, but the number of the tuberculous has never been as large as at present. If the cost of maintenance for consumptives were no greater than for ordinary cases, the annual expenditure would be \$4,300, but we know that they require more, hence we will be nearer the truth if we say \$7,000, which with the expense at the city hospital makes \$7,600. This sum pretty closely approximates the annual amount spent in San Antonio for the relief of consumptives. Inasmuch as over 57 per cent of the cases, as we have previously seen, either were born in Texas or had lived there for a greater period than two years, the remaining 43 per cent is the proportion of the total which clearly and unmistakably belongs to communities outside of the State. This sum is \$3,260, the annual expenditure of one of the principal

resort cities of the country for interstate indigent consumptives. Based upon the average population during this period, the per capita cost has been approximately 3 cents per year. Whether the business brought to that city by health seekers is worth this amount is for the citizens to determine.

There are certain other expenditures by organized charity in this city which have not been considered. The county annually expends about \$250 for the transportation of paupers, half of whom are tuberculous. The head of the Jewish charities states that 50 per cent of their last year's expense (\$3,900) was for indigent consumptives, belonging either in the city or elsewhere. A well-directed Associated Charities, which is the central relief body of the city, has furnished assistance to the following:

	All cases.	Consump- tives.	Transient consump- tives.
1911.....	571	124	46
1912.....	572	97	47
1913.....	503	71	32

Much of this aid has been in the form of transportation, the cost of which can not be estimated, but some has been for meals and hospital care, the latter being included in the tables just given. There are no visiting nurses and no attempt is made through other means to assist patients. A free clinic, the only one in the city, is maintained in the Mexican quarter and does a vast amount of good, but is not patronized by health seekers.

This, then, represents, so far as could be determined, the annual expenditures and the amount of relief furnished by organized charity to consumptives. While the total sum does not seem particularly large for a city of over 100,000 people, it is an expense which is poorly borne, because it does not rightfully belong to the taxpayers.

Let us move westward to El Paso, one of the favorite haunts for consumptives and particularly for indigents. These cases are all maintained at the county poor farm, and the following table covers the 10-year period.

TABLE 12.—*Consumptive paupers, city of El Paso, for 10-year period.*

	All ad- missions.	Tubercu- losis admis- sions (19 per cent).		All ad- missions.	Tubercu- losis admis- sions (19 per cent).
1904.....	175	32	1910.....	398	77
1905.....	185	39	1911.....	364	80
1906.....	241	49	1912.....	409	53
1907.....	267	59	1913.....	443	58
1908.....	305	67			
1909.....	298	70			
				3,085	584

It will be seen that the average number of admissions yearly has been 58, or 19 per cent of the total number of patients cared for at county and city expense, this percentage including the very large number of tuberculous Mexican poor. It is unfortunate that no data regarding the length of residence is available and the only means we have for determining where they belonged is by the birthplace. The following table indicates their origin:

TABLE 13.—*Birthplace of indigent consumptives, city of El Paso.*

Texas (6.3 per cent).....	37
Other States (55 per cent).....	321
Foreign (14.7 per cent).....	86
Mexico (21.5 per cent).....	126
Unknown (2.4 per cent).....	14
 Total.....	 584

It is found that 21.5 per cent of the total indigent cases were Mexican born, corresponding very closely with the record at San Antonio, 23 per cent, and also with the percentage of deaths among the non-indigents of those two cities. A somewhat higher proportion, 14.7 per cent, were of foreign birth other than Mexican, making a total of 36.2 per cent who were born outside the United States. Only 6.3 per cent were Texas born, the reason for this being that transportation is cheaper than maintenance for those near their homes. The largest class, 55 per cent, were born in other States, the birthplace of the remaining 2.4 per cent being undetermined.

The 321 indigent consumptives from other States originated as follows:

TABLE 14.—*States where indigent consumptives originated, city of El Paso.*

Missouri.....	38	North Carolina.....	6
Illinois.....	33	South Carolina.....	5
Ohio.....	26	Kansas.....	5
New York.....	19	New Jersey.....	4
Tennessee.....	18	Maine.....	4
Pennsylvania.....	16	Massachusetts.....	4
Virginia.....	15	Connecticut.....	3
Kentucky.....	14	District of Columbia.....	2
Alabama.....	14	Florida.....	2
Mississippi.....	11	New Mexico.....	2
Louisiana.....	10	California.....	2
Georgia.....	10	Maryland.....	1
Indiana.....	10	Colorado.....	1
Wisconsin.....	9	Nebraska.....	1
Iowa.....	9	Vermont.....	1
Michigan.....	8	Rhode Island.....	1
Minnesota.....	8	West Virginia.....	1
Arkansas.....	6	Oklahoma.....	2

El Paso County appropriates annually for the support of the poor between \$30,000 and \$40,000, \$15,000 being the average sum expended for maintaining the county hospital. The superintendent is of the opinion that although indigent consumptives make up less than one-fifth of the admissions, one-quarter of the expense should be charged up to them, \$3,750 representing the annual cost. However, 28 per cent of this expenditure is a proper charge, as these people were resident Mexicans or native Texans; hence \$2,600 is the average annual amount the El Pasoans have been obliged to pay in the shape of taxes for the care of tuberculous migrants from other States, and it should be remembered that this includes also those who have gained a residence in the State. Based upon the population the per capita cost to the taxpayers has been 7½ cents.

In this city the amount which citizens contribute indirectly is extremely large. There is no central charity organization such as every community should maintain, the work being accomplished through independent bodies. A free clinic was in operation for a year and a half and during this time 476 cases of tuberculosis were treated and 1,050 visits made to the homes of patients, a work the importance of which can not be overestimated, but 60 per cent of this was among the Mexicans. The Visiting Nurses' Association employs two nurses, one of whom devotes her sole time to the care of consumptives. During the last year this society cared for 89 totally indigent cases, furnishing transportation to 31, some being forwarded to extreme eastern and western points. The women's charity organization, Hotel Dieu, and many other societies also render important aid to consumptives.

At San Angelo, a city harboring at least 1,000 consumptives, there has never been an indigent problem, the outlay of the city and county combined not exceeding \$100 yearly, most of which is for transportation. The Associated Charities, however, expends approximately \$400 annually for aid and railroad fares.

At Fort Worth, Dallas, Galveston, Houston, and Oklahoma City, all nonresort cities, some complaint is made regarding indigents. At Galveston the origin of 167 consumptives dying during the last two years was determined. Of these, 147 belonged in the city, 15 were from other parts of Texas, 4 were sailors, and but 1 was from outside the State. Patients admitted to hospitals numbered 188, all but 6 of whom were residents of Texas. Four of the 6 were sailors, and 2 were Russians who had been in the city but a short time. Houston, being an important railway center, has a greater number of dependents, and the same can be said of Fort Worth and Dallas. These are patients en route to and from the resort cities who have become stranded, those who have been shipped in by other com-

munities, or the members of the large floating population previously referred to.

In 1909 the legislature of Texas was appealed to for assistance in solving the indigent consumptive problem of the State, it being claimed that indigents were so numerous that provision for their care was impossible and that they were a serious menace to health. The legislature responded by appropriating \$10,000 to secure transportation to their homes of all such residents of Texas, and the president of the State board of health immediately notified every county judge of the appropriation and its purpose. This amount remained available until July 11, 1911, but during this two-year period only \$268.85 was expended. Yet our records show that 15 per cent of all indigents at San Antonio are native Texans, and 34 per cent of the remainder have had a residence of over five years in the State, and 50 per cent over two years. Just why more of this fund was not used is extremely difficult to determine; certainly if the indigent problem had been either serious or menacing greater efforts would have been made toward its solution.

In New Mexico the situation differs in no respect from that of her sister State. The city of Albuquerque, directly or indirectly, expends about \$1,500 annually on consumptives, the principal hospital caring for 71 indigents during 1913, being partially reimbursed for their care by the State and city. According to the county clerk, Silver City has no consumptive paupers. Hospital records at Santa Fe show 25 indigents supported during the year, more than 20 of whom were native Mexicans. A former mayor of Deming states that the city expends from \$150 to \$200 annually, all of which is for transportation, and a county official claims that consumptives are not a burden upon the county, though people often object to their presence. In Las Vegas there is no great expenditure, but women in the town maintain a hospital which during the last seven years has cared for over 800 helpless sufferers, three-fourths of whom were tuberculous. Applicants have never been asked to explain their presence in the city, or their affliction, but if they were sick and in distress have been cared for. Raton, a short distance from the Colorado line, complains that that State ships her indigents to the nearest New Mexican point, which happens to be Raton; therefore they are obliged to draw on the county funds for some \$100 annually to purchase the return tickets. The remaining relief is dispensed through the city marshal, who seems to be the "Associated Charities" of the community, his contributions being secured by passing the hat in saloons.

A roundabout method of determining the financial status of at least a portion of migratory consumptives is to ascertain in what proportion of those dying from the disease the body is forwarded to relatives or friends, it being a reasonable conclusion that if funds are

available for this purpose there was no financial stringency before death.

The rates for the shipment of bodies are unreasonably high. They may be forwarded in two ways, either as baggage upon the purchase of the regular limited first-class passenger fare, in which case friends or relatives must accompany, thereby requiring two fares, or by express, the latter rate also invariably being double the first-class limited passenger rate. It is probable that more bodies are shipped by the former method, it often being possible to secure some person to accompany, although the expense in every case falls upon the relatives.

Three cities were taken, San Antonio, El Paso, and Albuquerque, the disposition of every corpse during a period of four years being recorded. All Mexicans have been eliminated, their bodies invariably being interred at the place of death, and native Texans as well, their remains being shipped to points within the State. We are dealing therefore with those migrating from other States whose bodies are returned to their former homes in other States. The percentage of bodies shipped, to those dying of tuberculosis, is as follows:

TABLE 15.—*Percentage of bodies shipped outside the State.*

Year.	San	El Paso.	Albu-
	Antonio.	Paso.	querque.
1910.....	Per cent.	Per cent.	Per cent.
1910.....	30	42	48
1911.....	36	41	57
1912.....	31	46	61
1913.....	28	48	59

The lower percentages at San Antonio may be accounted for by the fact that 12 per cent of the population are negroes, many of whom were born in other States, and among whom the tuberculosis death rate is extremely high, their bodies seldom being shipped out of the State. The El Paso and Albuquerque figures are more nearly representative of the typical resort, and they show a surprisingly large percentage of bodies returned to relatives, indicating that in these cases at least there was no financial stringency. It should not be concluded that the remainder did show financial stress, for a large proportion may have lived in the State a sufficient time to form attachments.

We come now to a phase of the indigent problem for which not the slightest justification can be found, and that is the unloading of consumptives of one community upon another. Not alone is it the common practice for some so-called charity organizations, but to a much greater extent for individuals and county and city officials, to dump their paupers, insane, criminals, and undesirables upon

neighboring cities. There can, of course, be no objection, except perhaps from a public-health standpoint, to county officials transferring indigent consumptives to points where they belong or will be properly provided for by relatives or friends, provided such action follows full and complete investigation of all circumstances, but the transportation of indigents for the mere sake of ridding a community of their presence is to be utterly condemned. County officials as a rule make no effort to hide their accomplishments in this direction, defending their action as being for the best interests of all concerned, and claiming that they were elected to office in that particular county and are interested only in the welfare of their own citizens. It is quite useless to explain that officers of adjoining counties hold similar views.

How extensive is this process of "passing on" consumptives? It prevails throughout the health belt, and there is probably not a town in that section which has not been guilty. It is impossible to determine how much is actually expended for this purpose, as the items are hidden in the miscellaneous expenditures of the various counties, but the writer found only one or two officials who denied the practice. A consumptive and insane penniless foreigner arrives in Galveston by steamer from New York, and within three days is in San Antonio. Who is responsible? Plainly either the residents or some city official. Every town visited claimed to be the victim of just such practices, but invariably justified its own action on the ground that it was the only possible remedy. Twenty-five consumptives shifted about western Texas and New Mexico in this fashion appear to number 250, and cause people to exclaim that the problem of the pauper consumptive is a fearful one. At the best, it is a serious one, but actions of this character serve only to magnify and increase it, and when paupers return for a second and third season, at the same time spreading the information among their fellows, how can a city hope for relief? It is contended that the Southwest has been made the dumping ground of pauper consumptives from other States. This is true in the sense that many visit, and some few may be forwarded, to that section improperly provided with funds, but is that justification for the continuance of this traffic? If cases were properly investigated or efforts made to determine the legal residence, there would be little cause for complaint, but this is seldom if ever done, the sole object seemingly being to rid the community of their presence. In some instances even dying patients have been shifted about in this manner.

The central charity organizations of such cities as San Antonio, Fort Worth, Dallas, Houston, and Oklahoma City deplore this method of dealing with indigents. In some of these cities it has been

agreed that the society, and no other organization, shall dispense half-rate charity tickets, a great step in advance. These relief bodies, as well as the principal charitable societies of the country, have subscribed to the National Transportation Rules, the fundamental principles of which are: That applicants must be unable to pay regular fare; that applicants' condition and prospects will be substantially improved by sending them to the place in question; that applicants will have such resources for maintenance at point of destination as will save them from becoming dependent upon charity; or, that applicants shall have a legal residence in the place to which they are sent, or be a proper charge upon the charity of such communities.

It would be highly desirable if these regulations could be adopted in the resort towns, as they would unquestionably greatly lessen the indigent problem. Officials state that if this were done and "passing on" discontinued their own community at least would be flooded with paupers; but it is difficult for an inexperienced person to see the force of this argument. There are a certain number who must necessarily be cared for by some one, and by avoiding the useless expenditure of funds in shifting them about a vast amount would be saved and, at the same time, pauperism discouraged. Even if the towns can not come to a mutual understanding in the matter, the humanitarianism of officials and their regard for the public health should cause them to discontinue a practice which is not only deplorable but merciless as well.

Indigency Among Tuberculous Mexicans.

Throughout this paper tuberculosis among the Mexicans has not been considered an interstate problem, as relatively few pass from one State to another. Nevertheless, it is a question of some concern to the two States under study, inasmuch as a large proportion of indigents—23 per cent at San Antonio and 21.5 per cent at El Paso—are Mexican born. To whom should these people be credited?

The United States immigration laws provide that any person afflicted with tuberculosis shall be debarred from entry. They furthermore prescribe "that any alien who shall enter the United States in violation of law and such as become public charges from causes existing prior to landing shall be deported to the country whence he came at any time within three years after his date of entry into the United States." For the purpose of enforcing these laws an inspection force is maintained at all ports of entry on the Mexican border, supplemented by additional men for the purposes of deportation in the cities referred to.

For the six years ending in 1909, before the influx of refugees began, there were the following deaths from tuberculosis among Mexican-born residents in El Paso:

TABLE 16.—*Length of residence of Mexicans dying from tuberculosis at El Paso.*

Deaths.	Under 30 days (4.7 per cent).	30 days to 6 months (5.5 per cent).	6 to 12 months (1.7 per cent).	1 to 2 years (6.1 per cent).	2 to 5 years (15.2 per cent).	5 to 10 years (24.8 per cent).	10 to 15 years (15.2 per cent).	15 to 20 years (9 per cent).	Over 20 years (13.1 per cent).	Unknown (4.4 per cent).
35.....	3	1	1	4	9	4	7	0	4	2
42.....	1	2	1	1	5	14	8	4	4	2
54.....	3	3	2	4	5	13	9	4	7	4
55.....	2	2	0	7	7	13	6	4	10	4
94.....	4	8	2	3	18	24	14	11	9	1
62.....	3	3	0	2	8	17	8	8	11	2
342.....	16	19	6	21	52	85	52	31	45	15

It will be seen that 4.7 per cent of these cases gave a residence of less than 30 days in the city. It is barely possible that some came from other points in Texas or of New Mexico, but the majority probably crossed the international boundary surreptitiously, or were undetected by the medical inspectors. Ten per cent had resided in the city for less than six months, and 18 per cent for less than two years, but tuberculosis is such a rapidly fatal disease among the Mexicans that every one of these cases could have been healthy at the time of arrival.

The detection of tuberculosis among arriving aliens is, as far as the border inspection is concerned, a difficult procedure. On an average, 20 such cases a year are certified, but this does not begin to represent the total number who have passed through, and more gain entrance illegally. Should, however, any of these cases become public charges, they become deportable at once under the immigration laws, but for some reason the towns are slow to take advantage of this process. Just what proportion of the above cases became public charges and could have been returned is unknown, as data relative to the period of residence were not available.

At San Antonio, however, the number of Mexican indigents suffering from tuberculosis is known, and during the last four years they comprised 23 per cent of all those cared for at public expense. With the idea of determining just what proportion were deportable, the following table was prepared, giving the length of residence in the State, and therefore pretty conclusively proving that they crossed the international boundary and were aliens.

TABLE 17.—*Length of residence, Mexican paupers, city of San Antonio.*

Under 30 days.....	0
30 days to 6 months.....	7
6 months to 12 months.....	7
1 to 3 years.....	18
3 to 5 years.....	16
Over 5 years.....	37

Of the total number of public charges there were 32, or 37.6 per cent, who had been in the State for a shorter period than three years, and therefore should have had their cases investigated with the idea of determining if they belonged to the deportable class. If it could have been shown that the disease existed from causes prior to landing, the entire number, comprising 8 per cent of San Antonio's tuberculous poor, could have been deported, even under the present laws. The reasons why action was not taken were undoubtedly that the disease is so rapidly fatal in this class and that deportation would have been a great hardship.

Remedies for the Relief of the Indigent Problem.

We have seen that the indigent problem appears to be far greater in the larger cities, the smaller towns apparently not suffering to any extent except as cases are shipped in upon them. The amount which has been done by the towns themselves is little indeed when the enormous number of health seekers is considered, but we must again repeat that this in no respect measures the extent of the problem. As towns they have done little because they were unable to do more, and also, and this is an important reason, because they were of the opinion that if more were done the burden would increase. What the towns have failed to do as corporations the residents have fully compensated for as citizens, and the burden to them has not only been great but long continued.

The proportion of those who are wholly unable to provide for themselves is, outside of the centers of population, extremely low. In the cities this class is largely made up of those who drift about from place to place, but their ranks are recruited as well from the improvident, the unintelligent, and many who hope to find employment. The number of consumptives in all places who are inadequately provided with funds is large, yet they do not become public charges, and are successful in eking out an existence in some manner, although in doing so their chances for recovery are greatly lessened.

There is no single remedy to be offered for this situation. The prime requisite, naturally, is to exercise control at the source of the supply, and practically the only method of accomplishing this is through educational means. The public is already partially informed, and physicians who are largely, though unjustly, held responsible for the sad condition of affairs now realize that only favorable cases should be sent. The opening of large sanatoria in the East may serve to further decrease the flow. It is feared, however, that after everything possible has been done this section must pay the penalty of being situated in an atmosphere craved by rich and poor alike.

A common suggestion is that the State should institute quarantine procedures, debarring all those who are unable to show that they are

properly provided with funds. This plan is both impracticable and impossible, and the cost of maintaining such a system would be many times greater than the expense it hopes to save. As a public health measure it is without reason.

In San Antonio over 57 per cent of consumptive paupers are either Texas born or have been residents of the State for a longer period than two years. This means that that city is caring for many who come from the eastern and northern sections of the Commonwealth, and legislation to correct this evil should be instituted at home. There is at present no provision of law whereby a community forced to care for dependents from other cities within the State can be reimbursed for such expenditure, but it would seem that such legal enactment would give beneficial results, and precedents for legislation of this character are numerous.

One other remedy has been offered, and that is the erection of Federal hospitals in the Southwest to care for all indigents. Those who contend that this should be done claim that the entire question is an interstate problem, an erroneous impression by the way; that these people have left their native States and can expect no relief from that source, and that the burden upon the Southwestern States is unreasonable and unjust. Furthermore, they declare that invalids from other sections are giving rise to infection among their own people, and that it devolves upon the National Government, which exercises control over interstate sanitary matters, to act.

As a public-health measure the erection of hospitals for the cure or treatment of tuberculosis is not by any means the most important requisite. The relief of poverty, the regulation of housing, decreasing the morbidity from other diseases, the eradication of unhygienic surroundings, the prohibition of the employment of children, and the control of the hours and conditions of labor, all take precedence over the construction of hospitals as preventive measures. This does not mean that institutional care for the tuberculous is not desirable, or that it has had no effect in decreasing the morbidity and mortality from the disease, as all our figures go to prove the contrary, but that it is but one of several measures to be adopted.

As a solution of the indigent problem, there is far more reason for the erection of Federal hospitals. That there are hundreds of consumptives scattered throughout the health belt who are improperly provided with funds and sadly in need of institutional treatment, goes without saying. We can not expect the resort States to care for these impoverished strangers, and they are perfectly right in demanding that there be some place open to the reception of those who are unable to provide for themselves.

Several interesting questions arise at this point. Would the erection of such institutions, open to the reception of those without means, tend to attract an even greater number of tuberculous poor

to that section? Public officials have repeatedly contended that the reason their respective cities did not attempt more in the way of relief was that it was feared that it would be bruited abroad and increase their burden. Is the same argument applicable in this instance, and would the effect be to stimulate rather than to diminish the flow, for we must remember that the supply of tuberculous poor is inexhaustible? Again, those cities which are loudest in their cry that aid be rendered, very possibly, and we might even say quite probably, would offer strenuous objections to the erection of such institutions in their immediate neighborhood, yet in order to accomplish the purpose for which they are intended they should be accessible to the large centers and not relegated to isolated districts. The entire question is one which should be approached with some caution, and it would seem that it would be preferable to modify in some manner existing regulations governing the admissions of patients to Government hospitals whereby assistance may be rendered and the effects observed, without first going into an extended scheme of hospital construction.

Irrespective of an invalid's physical condition, what is the least amount required by one who contemplates a climatic cure? Before answering this question we must state that a person who measures his earning capacity in the West by what it has been in the East, is making the greatest error, for not only are industrial conditions different but relatively few consumptives can secure employment; therefore it is essential that every health seeker should have a reserve fund upon which to draw. If he is unable to obtain this, whatever his condition, he should remain at home, as the one advantage of climate is insufficient to compensate for the difficulties he is sure to encounter. This means that all those not properly provided with funds are really lessening their chances of recovery by venturing forth. While this statement may seem unsupportable, when we realize that it is not climate which cures, but rest, fresh air, and nourishing food, all three of which only money can buy, one can see that it is not far from the truth after all.

Our standards of living vary to such an extent that it is wholly impossible to fix upon a definite sum as being required by all invalids. However, it is safe to say that no person should leave his home who has not funds to cover his entire expenses for a period of six months after arrival, and preferably for a year. Here again one should not estimate his expenses by what they have previously been, but only after a complete knowledge of actual living conditions and all other circumstances. The cure of tuberculosis is so largely dependent upon proper surroundings and satisfactory living conditions that sacrifice of either is a loss to the health seeker not easily compensated for.

[This article will be concluded in a subsequent issue.]

PLAQUE-PREVENTION WORK.

CALIFORNIA.

The following report of plague-prevention work in California for the week ended March 27, 1915, has been received from Passed Asst. Surg. Hurley, of the United States Public Health Service, in temporary charge of the work:

San Francisco, Cal.

RAT PROOFING.

New buildings:	
Inspections of work under construction	291
Basements concreted (41,109 square feet)	80
Floors concreted (36,325 square feet)	61
Yards, passageways, etc. (29,785 square feet)	105
Total area of concrete laid (square feet)	107,219
Class A, B, and C (fireproof) buildings:	
Inspections made	265
Roof and basement ventilators, etc., screened	2,740
Wire screening used (square feet)	19,160
Openings around pipes, etc., closed with cement	10,591
Sidewalk lens lights replaced	4,835
Old buildings:	
Inspections made	664
Wooden floors removed	66
Yards and passageways, planking removed	22
Cubic feet new foundations walls installed	12,027
Concrete floors installed (56,331 square feet)	67
Basements concreted (24,819 square feet)	29
Yards and passageways, etc., concreted (37,030 square feet)	55
Total area concrete laid (square feet)	118,180
Floors rat-proofed with wire cloth (4,978 square feet)	5
Buildings razed	13

RAT PROOFING—continued.

Old buildings—Continued.	
New garbage cans stamped approved	608
Nuisances abated	407
OPERATIONS ON THE WATER FRONT.	
Vessels inspected for rat guards	28
Reinspections made on vessels	36
New rat guards procured	25
Defective rat guards repaired	13
Rats trapped on wharves and water front	24
Rats trapped on vessels	13
Traps set on wharves and water front	171
Traps set on vessels	42
Vessels trapped on	11
Poisons placed on water front (pieces)	3,600
Poisons placed within Panama-Pacific International Exposition grounds (pieces)	7,200
Bait used on water front and vessels, bacon (pounds)	6
Amount of bread used in poisoning water front (loaves)	12
Pounds of poison used on water front	6

RATS COLLECTED AND EXAMINED FOR PLAGUE.

Collected	253
Examined	192
Found infected	0
RATS IDENTIFIED.	
Mus norvegicus	135
Mus rattus	32
Mus alexandrinus	44
Mus musculus	42

Squirrels collected and examined for plague.

Contra Costa County	99
San Benito County	32
Santa Cruz County	15
Santa Clara County	9
Stanislaus County	5
Total	160
Found infected	0

Other animals collected and examined for plague.

Stanislaus County	1 rabbit.
Found infected	0

Ranches inspected and hunted over.

Contra Costa County	23
San Benito County	6
Santa Cruz County	4
Santa Clara County	6
Stanislaus County	3

Record of plague infection.

Places in California.	Date of last case of human plague.	Date of last case of rat plague.	Date of last case of squirrel plague.	Total number rodents found infected since May, 1907.
Cities:				
San Francisco.....	Jan. 30, 1908	Oct. 23, 1908	(1)	398 rats.
Oakland.....	Aug. 9, 1911	Dec. 1, 1908	(1)	126 rats.
Berkeley.....	Aug. 28, 1907	(1)	(1)	None.
Los Angeles.....	Aug. 11, 1908	(1)	Aug. 21, 1908	1 squirrel.
Counties:				
Alameda (exclusive of Oakland and Berkeley).....	Sept. 24, 1909	Oct. 17, 1909	Aug. 7, 1914	288 squirrels, 1 wood rat.
Contra Costa.....	May 17, 1914	(1)	Mar. 4, 1915	1,567 squirrels.
Fresno.....	(1)	(1)	Oct. 27, 1911	1 squirrel.
Merced.....	(1)	(1)	July 12, 1911	5 squirrels.
Monterey.....	(1)	(1)	Apr. 10, 1914	6 squirrels.
San Benito.....	June 4, 1913	(1)	Sept. 26, 1914	36 squirrels.
San Joaquin.....	Sept. 18, 1911	(1)	Aug. 26, 1911	18 squirrels.
San Luis Obispo.....	(1)	(1)	Jan. 29, 1910	1 squirrel.
Santa Clara.....	Aug. 31, 1910	(1)	July 23, 1913	25 squirrels.
Santa Cruz.....	(1)	(1)	May 17, 1910	3 squirrels.
Stanislaus.....	(1)	(1)	June 2, 1911	13 squirrels.

¹ None.² Wood rat.

Operations are being carried on under Federal supervision on the Tormey estate, Contra Costa County, labor and material being furnished by the owners, as follows:

Number of acres covered	347
Number of holes treated	6,192

The work is being carried on in the following-named counties: Alameda, Contra Costa, San Francisco, Merced, San Joaquin, Santa Cruz, Stanislaus, San Benito, Santa Clara, and San Mateo.

LOUISIANA—NEW ORLEANS—PLAQUE-ERADICATION.

The following report of plague-eradication work at New Orleans for the week ended March 27, 1915, has been received from Surg. Creel, of the United States Public Health Service, in temporary charge of the work:

OUTGOING QUARANTINE.

Vessels fumigated with sulphur.....	29
Vessels fumigated with carbon monoxide	6
Vessels fumigated with hydrocyanic gas	1
Pounds of sulphur used.....	6,536
Coke consumed in carbon monoxide fumigation (pounds).....	11,300
Pounds of potassium cyanide used in hydrocyanic gas fumigation.....	192 ¹
Pounds of sodium carbonate used in hydrocyanic gas fumigation.....	120
Pounds of sulphuric acid used in hydrocyanic gas fumigation.....	104
Clean bills of health issued.....	26
Foul bills of health issued.....	10

OVERLAND FREIGHT INSPECTION.

Cars inspected; found in good order; permitted to load.....	1,821
Cars ordered repaired before loading.....	1,280
Total cars inspected.....	3,101

DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED FOR WEEK ENDED MAR. 27, 1915.

Alabama.....	131
Arizona.....	3
Arkansas.....	10
California.....	14
Carolina, North.....	6
Carolina, South.....	4
Colorado.....	4
Delaware.....	2
Florida.....	13
Georgia.....	50
Illinois.....	83
Indiana.....	15
Iowa.....	6
Kansas.....	2
Kentucky.....	17
Louisiana.....	932
Massachusetts.....	5
Michigan.....	33
Minnesota.....	17
Mississippi.....	346

DESTINATION AND NUMBER OF RAILROAD CARS INSPECTED FOR WEEK ENDED MAR. 27, 1915—con.

Missouri.....	45
Nebraska.....	3
New Jersey.....	2
New York.....	36
Ohio.....	72
Oklahoma.....	5
Pennsylvania.....	15
Tennessee.....	69
Texas.....	176
Virginia.....	2
Washington.....	4
Wisconsin.....	12
Canada.....	8
Mexico.....	1

FIELD OPERATIONS.

Rats trapped.....	6,830
Number of premises inspected.....	10,325
Notices served.....	678

BUILDINGS RAT PROOFED.

By elevation.....	163
By marginal concrete wall.....	119
By concrete floor and wall.....	262
By minor repairs.....	384
Square yards of concrete laid.....	34,115
Total buildings rat proofed.....	958
Total buildings rat proofed to date.....	27,508
Number of abatements.....	1,654
Number of abatements to date.....	13,002

LABORATORY OPERATIONS.	
Rodents examined.....	3,373
Mus norvegicus.....	1,935
Mus rattus.....	161
Mus alexandrinus.....	172
Mus musculus.....	3,877
Wood rats.....	663
Putrid.....	65
Musk rats.....	132
Total rodents received at laboratory.....	6,943
Number of suspicious rats.....	6
Plague rats confirmed.....	0
Suspicious human cases examined.....	1
Number of human plague cases.....	0
Last case of human plague, October 4, 1914.	
Last case of rodent plague, March 9, 1915.	
Total number of rodents captured to March 27.....	307,203
Total number of rodents examined to March 27.....	230,009

Total cases of rodent plague to March 27, by species:

Mus musculus.....	4
Mus rattus.....	16
Mus norvegicus.....	207
Mus alexandrinus.....	9

Total rodent cases to March 27, 1915. 236

WASHINGTON—SEATTLE—PLAQUE ERADICATION.

The following reports of plague-eradication work at Seattle were received from Surg. Lloyd, of the United States Public Health Service, in charge of the work:

WEEK ENDED MAR. 6, 1915.

RAT PROOFING.

New buildings inspected.....	36
Basements concreted, new buildings, 16,280 square feet.....	8
Floors concreted, new buildings, 86,750 square feet.....	32
Yards, etc., concreted, new buildings, 3,830 square feet.....	5
Sidewalks concreted (square feet).....	20,450
Total concrete laid, new structures (square feet).....	127,350
New buildings elevated.....	7
Premises rat proofed, concrete, new buildings.....	30
Buildings razed.....	3

WATER FRONT.

Vessels inspected and histories recorded.....	9
Vessels fumigated.....	3
Sulphur used, pounds.....	3,800
New rat guards installed.....	22
Defective rat guards repaired.....	8
Fumigation certificates issued.....	3

WATER FRONT—continued.

Canal Zone certificate; issue 1.....	3
Port sanitary statements issue 1.....	34

LABORATORY AND RODENT OPERATIONS.

Dead rats received.....	21
Rodents trapped and killed.....	312
Rodents recovered after fumigation.....	11

Total..... 344

Rodents examined for plague infection.....	276
Rodents proven plague infected.....	None.
Poison distributed, pounds.....	13
Bodies examined for plague infection.....	7
Bodies found plague infected.....	None.

CLASSIFICATION OF RODENTS.

Mus rattus.....	5
Mus alexandrinus.....	55
Mus norvegicus.....	236
Mus musculus.....	36
Nonclassified.....	11

April 16, 1915

The usual day and night patrol was maintained to enforce rat guarding and fending.

MISCELLANEOUS WORK.

Visits to other cities in the interests of sanitary work.....	1
Lectures delivered on sanitary subjects.....	1
Meetings held to discuss sanitary measures.....	1
Rat-proofing notices sent to contractors.....	24
Communications sent regarding rat work.....	15

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped.....	40
Mus alexandrinus trapped.....	1
Mus musculus trapped.....	3
Total.....	44
Rodents examined for plague infection.....	44
Rodents proven plague infected.....	None.

WEEK ENDED MAR. 13, 1915.

RAT PROOFING.

New buildings inspected.....	28
Basements concreted, new buildings (11,475 square feet).....	6
Floors concreted, new building (53,780 square feet).....	14
Yards, etc., concreted, new buildings (1,875 square feet).....	3
Sidewalks concreted (square feet).....	16,790
Total concrete laid, new structure (square feet).....	86,920
New buildings elevated.....	4
Premises rat proofed, concrete.....	20
Old buildings inspected.....	47
Buildings razed.....	3

WATER FRONT.

Vessels inspected and histories recorded.....	11
Vessels fumigated.....	3
Sulphur used, pounds.....	1,575
New rat guards installed.....	14
Defective rat guards repaired.....	6
Fumigation certificates issued.....	3
Canal Zone certificates issued.....	3
Port sanitary statements issued.....	36

LABORATORY AND RODENT OPERATIONS.

Dead rats received.....	30
Rodents trapped and killed.....	293
Rodents recovered after fumigation.....	30
Total.....	353

WEEK ENDED MAR. 20, 1915.

RAT PROOFING.

New buildings inspected.....	26
Basements concreted, new buildings (14,700 square feet).....	9
Yards, etc., concreted, new buildings (2,790 square feet).....	5
Floors concreted, new buildings (67,840 square feet).....	19
Sidewalks concreted (square feet).....	27,490

Total concrete laid, new structures (square feet)..... 112,870

New buildings elevated.....	5
New premises rat proofed, concrete.....	22
Old buildings inspected.....	6
Premises rat proofed other than concrete, old buildings.....	5
Openings screened, old buildings.....	47
Rat holes cemented, old buildings.....	106
Doors rat proofed, old buildings.....	3
Wire screen used (square feet).....	947
Buildings razed.....	4

LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	23
Rodents trapped and killed.....	330
Rodents recovered after fumigation.....	2
Rodents examined for plague infection.....	294
Rodents proven plague infected.....	0
Poison distributed, pounds.....	17
Bodies examined for plague infection.....	6
Bodies found plague-infected.....	0

CLASSIFICATION OF RODENTS.

Mus rattus.....	12
Mus alexandrinus.....	49
Mus norvegicus.....	262
Mus musculus.....	45
Unclassified.....	1

WATER FRONT.

Vessels inspected and histories recorded.....	13
Vessels fumigated.....	1
Sulphur used, pounds.....	475

WATER FRONT—continued.

New rat guards installed.....	19
Defective rat guards repaired.....	8
Fumigation certificates issued.....	2
Canal Zone certificates issued.....	2
Port sanitary statements issued.....	42

MISCELLANEOUS WORK.

Lectures delivered on sanitary subjects.....	2
Rat-proofing notices sent to contractors.....	24
Fishing vessels inspected and medicine chests installed.....	8

MISCELLANEOUS WORK—continued.

Meetings held to discuss plague-suppressive measures.....	1
The usual day and night patrol was maintained to enforce rat guarding and fending.	

RODENTS EXAMINED IN EVERETT.

Mus alexandrinus trapped.....	3
Mus norvegicus trapped.....	24
Mus norvegicus found dead.....	5
Total.....	32
Rodents examined for plague infection.....	32
Rodents proven plague infected.....	0

WEEK ENDED MAR. 27, 1915.

RAT PROOFING.

New buildings inspected.....	37
Basements concreted, new buildings (11,280 square feet).....	8
Floors concreted, new buildings (65,970 square feet).....	16
Yards, etc., concreted, new buildings (1,450 square feet).....	3
Sidewalks concreted, (square feet).....	32,450
Total concrete laid, new structures (square feet).....	111,150
New buildings elevated.....	4
New premises rat proofed, concrete.....	21
Old buildings inspected.....	5
Premises rat proofed other than concrete, old buildings.....	3
Openings screened, old buildings.....	16
Rat holes cemented, old buildings.....	57
Wooden floors removed, old buildings.....	2
Wire screen used (square feet).....	780
Buildings razed.....	2

LABORATORY AND RODENT OPERATIONS.

Dead rodents received.....	16
Rodents trapped and killed.....	487
Total.....	503
Rodents examined for plague infection.....	370
Rodents proven plague infected.....	0
Poison distributed, pounds.....	24
Bodies examined for plague infection.....	4
Bodies found plague infected.....	0

CLASSIFICATION OF RODENTS.

Mus rattus.....	30
Mus alexandrinus.....	88
Mus norvegicus.....	278
Mus musculus.....	107
Total.....	503

WATER FRONT.

Vessels inspected and histories recorded.....	8
Vessels fumigated.....	2
Sulphur used, pounds.....	350
New rat guards installed.....	9
Defective rat guards repaired.....	6
Fumigation certificates issued.....	2
Port sanitary statements issued.....	36

MISCELLANEOUS WORK.

Lectures delivered on sanitation.....	2
Rat-proofing notices sent to contractors.....	19
Boxes of plants examined for evidence of rats (no evidence found).....	39
Fishing vessels inspected and medicine chests installed.....	13
The usual day and night patrol was maintained to enforce rat guarding and fending.	

RODENTS EXAMINED IN EVERETT.

Mus norvegicus trapped.....	36
Mus norvegicus found dead.....	7
Mus musculus trapped.....	1
Total.....	44
Rodents examined for plague infection.....	39
Rodents found plague infected.....	0

HAWAII—PLAQUE-PREVENTION WORK.

The following reports of plague-prevention work in Hawaii have been received from Surg. Trotter, of the United States Public Health Service:

Honolulu.

WEEK ENDED MAR. 13, 1915.

Total rats and mongooses taken.....	455	Classification of rats trapped—Continued.
Rats trapped.....	444	Mus musculus..... 142
Mongoose trapped.....	11	Mus norvegicus..... 52
Examined microscopically.....	367	Mus rattus..... 30
Showing plague infection.....	0	Average number of traps set daily..... 1,085
Classification of rats trapped:		Cost per rat destroyed..... 18½ cents
Mus alexandrinus.....	222	

April 16, 1915

Honolulu.

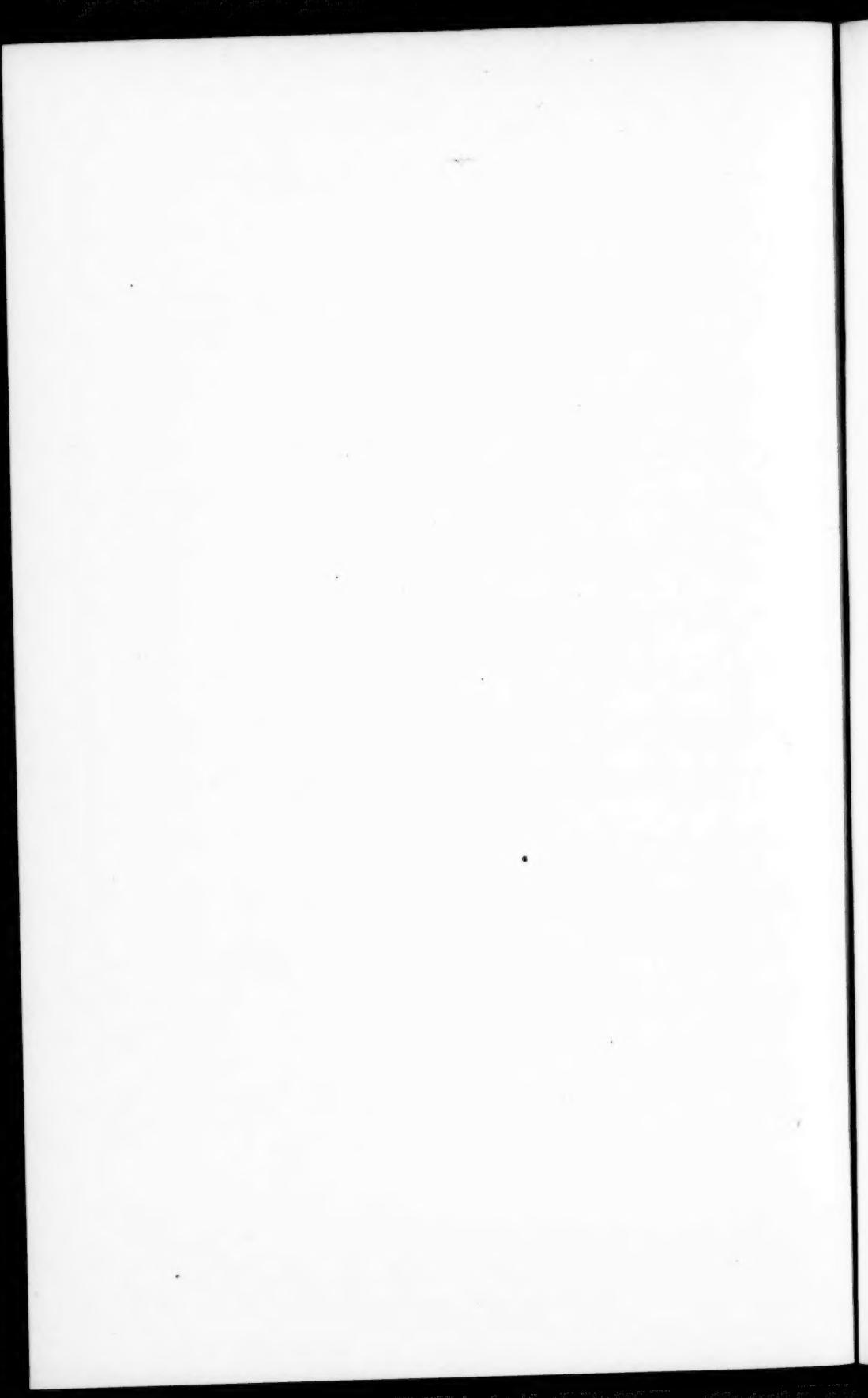
WEEK ENDED MAR. 20, 1915.

Total rats and mongoose taken.....	483	Average number of traps set daily.....	1,085
Rats trapped.....	471	Cost per rat destroyed.....	17½ cents.
Mongoose trapped.....	11	Last case rat plague, Alea, 9 miles from Honolulu,	
Rats found dead (<i>Mus musculus</i>).....	1	April 12, 1910.	
Examined microscopically.....	384	Last case human plague, Honolulu, July 12, 1910.	
Showing plague infection.....	0	Last case rat plague Kalopa stable, Paauhau,	
Classification of rats trapped:		Hawaii, Aug. 29, 1914.	
<i>Mus alexandrinus</i>	209	Last case human plague, Paauhau Landing, Ha-	
<i>Mus musculus</i>	153	waii, Aug. 17, 1914.	
<i>Mus norvegicus</i>	59		
<i>Mus rattus</i>	50		

Hilo.

WEEK ENDED MAR. 13, 1915.

Number of rats and mongoose taken.....	2,885	Classification of rats trapped and found dead:	
Rats trapped.....	2,850	<i>Mus norvegicus</i>	587
Rats found dead.....	1	<i>Mus alexandrinus</i>	473
Mongoose taken.....	34	<i>Mus rattus</i>	995
Rats and mongoose examined macroscopically	2,885	<i>Mus musculus</i>	796
Rats and mongoose examined microscopically.....	1	Last case of rat plague, Paauhau Sugar Co., Aug. 29,	
Rats and mongoose plague infected.....	0	1914.	
		Last case of human plague, Paauhau Sugar Co.,	
		Aug. 16, 1914.	



PREVALENCE OF DISEASE.

No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring.

IN CERTAIN STATES AND CITIES.

BERIBERI.

Virginia—Cape Charles Quarantine.

Acting Asst. Surg. MacCaffry reported by telegraph April 12, 1915, that 63 cases of beriberi, all convalescent, were present on the German auxiliary cruiser *Kronprinz Wilhelm* when she arrived at the Cape Charles quarantine station April 11, 1915.

CEREBROSPINAL MENINGITIS.

City Reports for Week Ended Mar. 27, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Akron, Ohio.....			New Orleans, La.....	1	
Boston, Mass.....	1	1	Newport, Ky.....	1	
Buffalo, N. Y.....	1		New York, N. Y.....	6	2
Canton, Ohio.....			Philadelphia, Pa.....	1	
Chicago, Ill.....	1	1	Portland, Oreg.....		
Cincinnati, Ohio.....	1	1	Providence, R. I.....	1	
Erie, Pa.....	1		Wilkes-Barre, Pa.....	1	1
Kansas City, Kans.....	1	1	Washington, D. C.....		1

DIPHTHERIA.

California—San Francisco.

Passed Asst. Surg. Hurley reported by telegraph that during the week ended April 10, 1915, 18 new cases of diphtheria were notified in San Francisco, Cal.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1185.

ERYSIPelas.

City Reports for Week Ended Mar. 27, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Allentown, Pa.....	3		Johnstown, Pa.....	2	
Baltimore, Md.....	1		Kalamazoo, Mich.....	2	1
Beaver Falls, Pa.....	1		Kenosha, Wis.....	1	
Binghamton, N. Y.....			Lancaster, Pa.....	3	
Brockton, Mass.....	1	1	Los Angeles, Cal.....	6	
Buffalo, N. Y.....			Milwaukee, Wis.....	1	
Chicago, Ill.....	44	5	Newark, N. J.....		
Cincinnati, Ohio.....	5		New York, N. Y.....		9
Cleveland, Ohio.....	11		Pittsburgh, Pa.....	7	1
Detroit, Mich.....	9	1	Reading, Pa.....	4	
Dayton, Ohio.....	1		St. Louis, Mo.....	12	1
Erie, Pa.....	1		San Francisco, Cal.....	9	1
Harrisburg, Pa.....	6		Schenectady, N. Y.....		
Hartford, Conn.....	2		Springfield, Ill.....	2	

MEASLES.

California—Los Angeles.

Senior Surg. Brooks reported regarding an outbreak of measles in Los Angeles, Cal., as follows: Thirty-nine cases of the disease were notified during the month of December, 1914; 15 cases, with 1 death, were notified in January, 1915; 488 cases, with 1 death, in February; and 1,363 cases, with 2 deaths, in March.

See also Diphtheria, measles, scarlet fever, and tuberculosis, page 1185.

PELLAGRA.

City Reports for Week Ended Mar. 27, 1915.

During the week ended March 27, 1915, pellagra was notified by cities as follows: Beaver Falls, Pa., 1 case; Philadelphia, Pa., 2 cases; San Diego, Cal., 1 case; Shreveport, La., 1 death.

PNEUMONIA.

City Reports for Week Ended Mar. 27, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Auburn, N. Y.	2	2	Marinette, Wis.	1	1
Binghamton, N. Y.	16	6	New Castle, Pa.	2	—
Boston, Mass.	—	1	Newport, Ky.	1	1
Braddock, Pa.	1	—	Norfolk, Va.	5	5
Canton, Ohio.	1	4	Norristown, Pa.	1	—
Chicago, Ill.	289	127	Pascagoula, Miss.	1	—
Cleveland, Ohio.	71	25	Philadelphia, Pa.	88	73
Dayton, Ohio.	1	4	Reading, Pa.	4	2
Detroit, Mich.	7	11	Rochester, N. Y.	9	5
Duluth, Minn.	2	2	San Francisco, Cal.	8	6
Dunkirk, N. Y.	2	1	Schenectady, N. Y.	11	5
Erie, Pa.	2	—	South Omaha, Nebr.	1	—
Grand Rapids, Mich.	4	8	Spokane, Wash.	3	3
Jackson, Mich.	4	—	Steelton, Pa.	2	—
Kalamazoo, Mich.	6	6	Steubenville, Ohio.	2	—
Kansas City, Mo.	4	11	Stockton, Cal.	1	—
Lancaster, Pa.	3	—	Toledo, Ohio.	1	3
Los Angeles, Cal.	15	7	York, Pa.	2	—
Manchester, N. H.	3	3			

ROCKY MOUNTAIN SPOTTED FEVER.

Washington—Lincoln County.

The State Board of Health of Washington reported by telegraph April 12, 1915, that two cases of Rocky Mountain spotted fever had been notified in Lincoln County, Wash.

SCARLET FEVER.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1185.

April 16, 1915

SMALLPOX.**California—San Diego.**

Acting Asst. Surg. McKay reported by telegraph that on April 8, 1915, the steamship *Northern Pacific* arrived at San Diego, Cal., from Philadelphia, Pa., via the Canal Zone, with one case of smallpox on board, and that the patient was removed at the San Diego quarantine station, and the vessel and baggage were disinfected.

California—Imperial County.

Acting Asst. Surg. Richter reported by telegraph that during the week ended April 10, 1915, two cases of smallpox were notified in Imperial County, Cal.

Kansas.

Collaborating Epidemiologist Crumbine reported that during the week ended April 3, 1915, cases of smallpox were notified in counties of Kansas as follows: Anderson 9, Barber 1, Cherokee 2, Clark 1, Coffee 2, Crawford 9, Douglas 2, Kingman 3, Montgomery 2, Osborne 1, Reno 3, Sedgwick 2, Shawnee 1, Sumner 3, Wyandotte 4.

Minnesota.

Collaborating Epidemiologist Bracken reported by telegraph that during the week ended April 10, 1915, new foci of smallpox infection were reported in Minnesota, cases of the disease having been notified as follows: Faribault County, Verona Township, 2; Lincoln County, Tyler, 1; Mower County, Waltham, 1; Pipestone County, Aetna Township, 1; Redwood County, Willow Lake Township, 1; Stearns County, Maine Prairie Township, 3.

Texas—Laredo.

Acting Asst. Surg. Hamilton reported that during the week ended March 27, 1915, 17 new cases of smallpox, with 2 deaths, were notified in Laredo, Tex., making a total of 166 cases reported since January 16, 1915.

City Reports for Week Ended Mar. 27, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Camden, N. J.	5		Madison, Wis.	3	
Canton, Ohio	4		Milwaukee, Wis.	5	
Charleston, S. C.	20		Moline, Ill.	3	
Covington, Ky.	1		Muncie, Ind.	11	
Dallas, Tex.	6		Newport News, Va.	1	
Danville, Ill.	2		Ogden, Utah	4	
Davenport, Iowa	21		Portland, Ore.	4	
Detroit, Mich.	1		Pueblo, Colo.	1	
Evansville, Ind.	17		Quincy, Ill.	2	
Galveston, Tex.	2		Racine, Wis.	1	
Grand Rapids, Mich.	3		Roanoke, Va.	1	
Larrisburg, Pa.	1		St. Louis, Mo.	5	
Kansas City, Kans.	14		Salt Lake City, Utah	1	
Kansas City, Mo.	1		Sioux City, Iowa	1	
Knoxville, Tenn.	1		Spokane, Wash.	1	
La Crosse, Wis.	2		Springfield, Ill.	2	
Little Rock, Ark.	2		Tacoma, Wash.	1	
Los Angeles, Cal.	1		Toledo, Ohio	5	

TETANUS.

City Reports for Week Ended Mar. 27, 1915.

During the week ended March 27, 1915, tetanus was notified by cities as follows: Chicopee, Mass., 1 case; Los Angeles, Cal., 1 case with 1 death; Mobile, Ala., 2 deaths; Wilmington, N. C., 1 death (neonatorum).

TUBERCULOSIS.

See Diphtheria, measles, scarlet fever, and tuberculosis, page 1185.

TYPHOID FEVER.

City Reports for Week Ended Mar. 27, 1915.

Places.	Cases.	Deaths.	Places.	Cases.	Deaths.
Akron, Ohio.....	1	1	Milwaukee, Wis.....	1	2
Alameda, Cal.....	1	1	Mobile, Ala.....	1	1
Allentown, Pa.....	1		Nashville, Tenn.....	1	
Ann Arbor, Mich.....	1		New Bedford, Mass.....	1	
Auburn, N. Y.....	1		New York, N. Y.....	23	5
Baltimore, Md.....	10	1	Norfolk, Va.....	1	
Boston, Mass.....	7		North Adams, Mass.....	1	
Brookline, Mass.....	1		Philadelphia, Pa.....	8	2
Buffalo, N. Y.....	1	1	Pittsburgh, Pa.....	1	1
Cambridge, Mass.....	1		Portland, Oreg.....	1	
Canton, Ohio.....		1	Providence, R. I.....	1	
Chicago, Ill.....	24	4	Reading, Pa.....	1	
Cleveland, Ohio.....	8	2	Richmond, Va.....	1	
Covington, Ky.....	2		Roanoke, Va.....	1	
Dallas, Tex.....		1	Rockford, Ill.....	1	
Dayton, Ohio.....	2	1	Rutland, Vt.....		1
Detroit, Mich.....	6	2	Sacramento, Cal.....	4	1
Dubuque, Iowa.....		1	Saginaw, Mich.....	7	
Duluth, Minn.....	1		St. Louis, Mo.....	1	1
Evansville, Ind.....	2		San Francisco, Cal.....		1
Everett, Mass.....	1		Saratoga Springs, N. Y.....	3	
Fall River, Mass.....	2		Schenectady, N. Y.....	2	1
Galveston, Tex.....	1		Somerville, Mass.....	1	
Grand Rapids, Mich.....	1	1	Spokane, Wash.....	1	
Jersey City, N. J.....	1		Steubenville, Ohio.....	2	
Kansas City, Mo.....		1	Toledo, Ohio.....	10	
Lancaster, Pa.....	2		Waltham, Mass.....		1
Lorain, Ohio.....	1	1	Washington, D. C.....	1	
Los Angeles, Cal.....	4	1	Wheeling, W. Va.....	1	
Lowell, Mass.....	1		Wilkinsburg, Pa.....		1
Malden, Mass.....		1	Wilmington, N. C.....	1	
Manchester, N. H.....	1		Worcester, Mass.....	1	

TYPHUS FEVER.

New York—New York City.

During the week ended March 27, 1915, a case of typhus fever was notified at New York.

April 16, 1915

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS.

City Reports for Week Ended Mar. 27, 1915.

Cities.	Population as of July 1, 1914. (Estimated by United States Census Bureau.)	Total deaths from all causes.	Diphtheria.		Measles.		Scarlet fever.		Tuberculosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Over 500,000 inhabitants:										
Baltimore, Md.	579,599	194	29	1	25	—	34	—	50	26
Boston, Mass.	733,102	273	64	7	259	3	80	3	57	15
Chicago, Ill.	2,333,325	823	115	18	718	5	64	1	269	94
Cleveland, Ohio.	639,431	169	38	4	57	—	14	1	33	15
Detroit, Mich.	537,650	165	26	1	7	—	23	1	36	13
New York, N. Y.	5,337,537	1,750	364	38	1,344	13	384	7	513	214
Philadelphia, Pa.	1,657,810	556	40	3	322	11	31	1	132	52
Pittsburgh, Pa.	564,878	234	28	3	142	2	32	1	30	29
St. Louis, Mo.	734,607	228	76	6	196	1	18	—	41	28
From 300,000 to 500,000 inhabitants:										
Buffalo, N. Y.	451,112	282	22	2	3	—	9	1	48	37
Cincinnati, Ohio.	402,175	117	8	—	33	—	9	—	22	18
Los Angeles, Cal.	438,914	127	6	1	339	1	13	1	40	19
Milwaukee, Wis.	417,054	114	19	2	—	—	10	1	24	17
Newark, N. J.	389,106	107	39	2	4	—	19	—	50	10
New Orleans, La.	361,221	176	21	—	16	—	5	—	24	20
San Francisco, Cal.	448,502	138	32	4	76	—	9	1	40	18
Washington, D. C.	353,373	166	8	—	49	—	33	1	30	20
From 200,000 to 300,000 inhabitants:										
Jersey City, N. J.	293,921	88	19	1	12	—	19	1	35	7
Kansas City, Mo.	281,911	87	3	—	6	—	3	—	2	7
Portland, Oreg.	260,601	55	4	—	—	—	4	—	4	3
Providence, R. I.	245,090	80	16	1	6	1	36	—	4	9
Rochester, N. Y.	241,518	87	—	—	14	—	14	1	14	6
From 100,000 to 200,000 inhabitants:										
Cambridge, Mass.	110,357	41	7	3	31	—	9	—	9	10
Camden, N. J.	102,465	—	3	—	24	—	3	—	8	—
Dallas, Tex.	111,986	5	—	—	—	—	2	—	—	—
Dayton, Ohio.	123,794	36	3	—	7	—	15	—	5	6
Fall River, Mass.	125,443	59	3	3	7	—	3	—	8	9
Grand Rapids, Mich.	123,227	53	3	—	3	—	2	—	5	7
Hartford, Conn.	107,038	—	4	—	—	—	2	—	5	2
Lowell, Mass.	111,004	43	2	—	2	—	7	—	3	4
Nashville, Tenn.	114,899	41	1	—	2	—	1	—	7	7
New Bedford, Mass.	111,230	32	—	—	26	—	3	—	10	2
Oakland, Cal.	183,002	9	7	—	11	—	3	—	6	7
Reading, Pa.	103,361	39	4	1	—	—	2	1	14	1
Richmond, Va.	134,917	66	3	—	2	—	15	—	2	6
Salt Lake City, Utah.	109,530	27	1	—	2	—	1	—	2	1
Spokane, Wash.	135,657	—	—	—	4	—	1	—	1	—
Springfield, Mass.	100,375	41	3	1	12	—	2	1	6	4
Tacoma, Wash.	103,418	—	1	—	—	—	4	—	—	—
Toledo, Ohio.	184,126	70	6	1	21	1	3	—	1	6
Trenton, N. J.	106,831	44	4	—	—	1	3	—	6	4
Worcester, Mass.	157,732	57	6	—	—	—	5	—	8	10
From 50,000 to 100,000 inhabitants:										
Akron, Ohio.	80,291	—	3	—	—	—	4	—	—	3
Allentown, Pa.	60,297	—	2	—	—	—	—	—	—	—
Altoona, Pa.	50,553	7	3	—	1	—	1	—	—	—
Atlantic City, N. J.	53,952	10	2	—	10	—	—	—	5	—
Bayonne, N. J.	65,271	—	3	—	2	—	2	—	2	—
Berkely, Cal.	52,105	6	2	—	12	—	1	—	1	1
Binghamton, N. Y.	52,191	23	—	12	—	—	2	—	2	—
Brockton, Mass.	64,013	16	4	1	2	—	1	—	1	1
Canton, Ohio.	—	23	—	—	—	—	4	—	—	2
Charleston, S. C.	—	26	—	—	—	—	—	—	—	2
Covington, Ky.	—	—	2	—	—	—	—	—	—	5
Duluth, Minn.	89,331	—	1	—	—	—	11	—	3	6
Erie, Pa.	72,401	28	—	—	—	—	7	—	—	—
Evansville, Ind.	71,281	25	1	1	72	1	2	—	1	8
Harrisburg, Pa.	69,493	30	2	—	1	—	1	—	7	2
Johnstown, Pa.	64,642	22	4	—	1	—	—	—	3	1
Kansas City, Kans.	94,271	—	—	1	3	—	3	1	1	1
Little Rock, Ark.	53,811	22	1	—	10	—	—	—	8	1
Lynn, Mass.	68,207	24	3	—	3	—	1	—	2	2
Manchester, N. H.	75,635	33	3	—	1	—	1	—	4	4
Mobile, Ala.	55,573	26	2	—	—	—	—	—	4	4

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

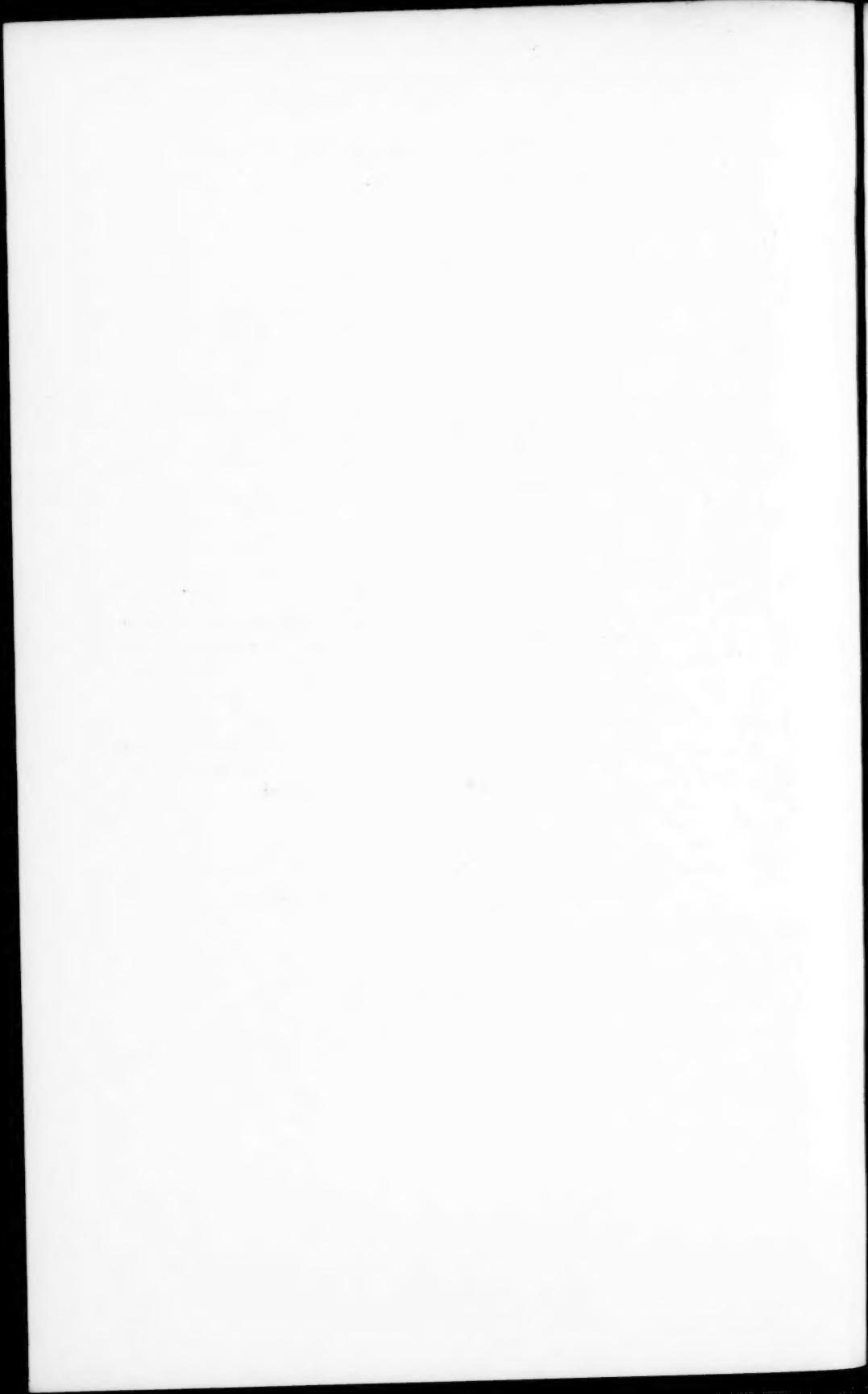
City Reports for Week Ended Mar. 27, 1915—Continued

Cities.	Population as of July 1, 1914. (Estimated by United States Census Bureau.)	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
From 50,000 to 100,000 inhabitants—Continued.										
New Britain, Conn.	70,612	6	7	2	22				1	
Norfolk, Va.	85,549				1			1	4	
Passaic, N. J.	66,276	13	3		1		15		7	
Pawtucket, R. I.	56,901	14	2							
Rockford, Ill.	72,237	5					2			
Saginaw, Mich.	53,988		1				2			
Schenectady, N. Y.	10,503	27	2	1	31	1				
South Bend, Ind.	65,114	12	1				1		3	
Springfield, Ill.	57,572	31			46		4	1		
Wilkes-Barre, Pa.	73,660	31	5		11		2		6	
From 25,000 to 50,000 inhabitants:										
Alameda, Cal.	26,330	6	2		6		2			
Auburn, N. Y.	36,109	19	1		1				3	
Aurora, Ill.	33,622	18	1			7				
Brookline, Mass.	31,138	11					8		2	
Butler, Pa.	25,545						1		1	
Chelsea, Mass.	32,452	20	4		12		1			
Chicago, Mass.	28,057	13							1	
Danville, Ill.	30,847	12	3						1	
Davenport, Iowa.	46,440		1	1	2		1			
East Orange, N. J.	39,852		3		2		3		1	
Everett, Mass.	37,381				25					
Fitchburg, Mass.	40,507	22	2				4		3	
Galveston, Tex.	40,289	16	3						1	
Haverhill, Mass.	47,071	18	2		18		3		6	
Kalamazoo, Mich.	45,842	21					1			
Lancaster, Pa.	49,685		1		1				7	
Lexington, Ky.	38,819	13			25	1	1		6	
Lynchburg, Va.	31,830				1		1		1	
Malden, Mass.	45,979	10	3	1	5		5		1	
Medford, Mass.	25,240	10	2		54					
Moline, Ill.	26,402	3			1					
Newcastle, Pa.	39,569		1				5			
Newport, Ky.	31,517	9	1				3		3	
Newport, R. I.	29,151	7					1		3	
Newton, Mass.	42,455	12	1		13		8	1	2	
Niagara Falls, N. Y.	35,127	13							1	
Norristown, Pa.	30,265	14	1		3				2	
Orange, N. J.	31,968	13	2						1	
Pasadena, Cal.	40,880	7			20		1			
Perth Amboy, N. J.	38,265	11	7		19		2		6	
Pittsfield, Mass.	35,531	9	2	1	113		2		3	
Portsmouth, Va.	37,569	12							1	
Racine, Wis.	44,528	12							1	
Roanoke, Va.	40,574		1							
Rochester, Ill.	26,945	8			30	2	1		2	
Sacramento, Cal.	62,717	9	3		4		1		2	
San Diego, Cal.	48,566	6	7	1				5		
South Omaha, Nebr.	26,398	7							5	
Superior, Wis.	44,244	15					1			
Taunton, Mass.	35,631	17	1						2	
Waltham, Mass.	29,688	14	1		1		1		2	
West Hoboken, N. J.	40,647	2	3		1				2	
Wheeling, W. Va.	42,817	16	2	1	2		3		3	
Wilmington, N. C.	27,781	8							5	
York, Pa.	49,430		1							
Zanesville, Ohio.	29,949				1					
Less than 25,000 inhabitants:										
Ann Arbor, Mich.	14,948	8	2		1		3		6	
Beaver Falls, Pa.	13,160				1					
Braddock, Pa.	20,935		1				1		1	
Cairo, Ill.	15,352	7								
Clinton, Mass.	13,075	10	1	1	2				1	
Concord, N. H.	15,392	14	1		1				2	
Cumberland, Md.	23,846	10	1				1		1	
Dunkirk, N. Y.	19,607	4							3	
Florence, S. C.		3								
Kearny, N. J.	21,967	7					1		4	
Key West, Fla.	21,150	6								
Marinette, Wis.	14,610	4					1			

DIPHTHERIA, MEASLES, SCARLET FEVER, AND TUBERCULOSIS—Contd.

City Reports for Week Ended Mar. 27, 1915—Continued.

Cities.	Population as of July 1, 1914. (Es- timated by United States Census Bureau.)	Total deaths from all causes.	Diph- theria.		Measles.		Scarlet fever.		Tuber- culosis.	
			Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Less than 25,000 inhabitants—Continued.										
Melrose, Mass.	16,887	8	1	—	36	—	1	—	—	—
Montclair, N. J.	24,782	7	2	—	—	—	1	—	—	—
Morristown, N. J.	13,033	5	—	—	—	—	1	—	—	—
Muncie, Ind.	24,969	2	1	—	—	—	1	—	—	2
Muscatine, Iowa	17,074	5	—	—	—	—	—	—	—	—
Nanticoke, Pa.	21,756	2	2	—	11	—	—	—	—	1
Newburyport, Mass.	15,147	3	—	—	—	—	—	—	—	1
Newport News, Va.	20,446	6	—	—	—	—	—	—	—	—
North Adams, Mass.	22,019	—	—	—	—	—	—	—	2	—
Northampton, Mass.	19,766	10	—	—	—	—	2	—	2	—
Palmer, Mass.	8,955	5	—	—	—	—	—	—	—	1
Pascagoula, Miss.	—	2	—	—	—	—	—	—	—	—
Plainfield, N. J.	22,755	7	—	—	12	—	2	—	2	—
Rutland, Vt.	14,417	4	—	—	—	—	—	—	—	—
Saratoga Springs, N. Y.	12,813	12	—	—	5	—	1	—	1	—
South Bethlehem, Pa.	22,840	2	1	—	—	—	—	—	1	2
Steelton, Pa.	15,126	2	—	—	—	—	—	—	—	—
Wilkinsburg, Pa.	21,701	6	3	—	1	—	3	—	3	—
Woburn, Mass.	15,755	7	—	—	—	—	—	—	—	—



FOREIGN REPORTS.

AUSTRIA-HUNGARY.

Cholera.

Cholera has been notified in Austria-Hungary as follows:

Austria.—February 14 to 27, 1915, 9 cases, of which 8 cases occurred among prisoners.

Bosnia-Herzegovina.—February 7 to 20, 1915, 11 cases.

Croatia-Slavonia.—February 7 to 20, 1915, 46 cases.

Cholera Carriers.

The finding of two cholera carriers at the quarantine station of Bosnisch Brod, Bosnia-Herzegovina, was reported during the week ended February 20, 1915.

Smallpox.

During the week ended March 6, 1915, 292 cases of smallpox were notified in Austria. In Vienna, from the outbreak of the war to March 6, 1915, 968 cases with 224 deaths were notified.

Typhus Fever.

During the two weeks ended February 27, 1915, 839 cases of typhus fever were notified in Austria. These cases occurred for the most part among persons from the scene of war.

BERMUDA.

Typhus Fever—Warwick Camp.

During the week ended March 20, 1915, a case of typhus fever was notified among troops at Warwick Camp.

BULGARIA.

Precaution Against Importation of Typhus Fever.

According to information dated March 20, 1915, on account of the prevalence of typhus fever in Servia entrance into Bulgaria has been prohibited to all persons arriving from Servia either directly or by way of Greece.

CHINA.**Plague—Plague-Infected Rat—Hongkong.**

During the week ended February 13, 1915, a fatal case of plague was notified at Hongkong.

During the two weeks ended February 20, 1915, 3,161 rats were examined at Hongkong. One plague-infected rat was found.

CUBA.**Plague—Habana.**

A case of plague was notified at Habana April 3, 1915, terminating fatally April 4, 1915. The case occurred in a Spaniard employed as an errand boy who in the course of his occupation visited all sections of the city during the seven days preceding onset of the disease. No infected rodents are known to have been found on the premises on which he lived. From February 5 to April 14, 1915, six cases of plague were notified in Habana.

Plague—Pinar del Rio.

Two cases of plague with 1 death were notified at Pinar del Rio, April 9, 1915.

Communicable Diseases—Habana.

Communicable diseases were notified at Habana during the 10-day period ended March 20, 1915, as follows:

Diseases.	New cases.	Deaths.	Remaining under treatment.	Diseases.	New cases.	Deaths.	Remaining under treatment.
Diphtheria.....	17	1	14	Scarlet fever.....	4	.....	8
Leprosy.....	.....	4	250	Smallpox.....	.....	.....	1
Malaria.....	1	.....	1	Typhoid fever.....	14	4	49
Measles.....	1	.....	5	Varicella.....	14	.....	18
Paratyphoid fever.....	2	.....	6				

¹ From the interior of the Republic.

ECUADOR.**Plague—Yellow Fever—Guayaquil.**

During the month of February, 1915, plague and yellow fever were notified in Guayaquil and vicinity as follows:

Plague.—Guayaquil, 40 new cases with 18 deaths; Agua Piedra, 1 case.

Yellow fever.—Guayaquil, 2 fatal cases.

Dysentery—Malaria—Typhoid Fever.

During the month under report dysentery (both amebic and bacillary), malaria, and typhoid fever were reported as very prevalent.

EGYPT.**Typhus Fever.**

Typhus fever has been notified in Egypt as follows: *Alexandria*, week ended March 4, 1915, 58 cases with 12 deaths; *Cairo*, week ended February 18, 1915, 11 deaths.

GERMANY.**Cholera.**

Five cases of cholera were notified in Germany during the two weeks ended March 13, 1915. The cases occurred in prison camps.

Typhus Fever.

During the week ended March 6, 1915, 21 cases of typhus fever, occurring among the military, were notified in Germany. The disease was also reported present during the same period among Russian prisoners in camps situated in 10 Government districts and in Saxony, Baden, and Saxe-Coburg-Gotha.

GREAT BRITAIN.**Examination of Rats—Liverpool.**

During the two weeks ended March 13, 1915, 508 rats were examined at Liverpool. No plague-infected rat was found. The total number of rats examined from July 25, 1914, to March 13, 1915, was 7,057. No plague infection was found.

GREECE.**Plague—Saleniki.**

The occurrence at Saloniki of 12 cases of plague, 5 among soldiers and 7 among refugees, was reported April 9, 1915.

JAPAN.**Typhus Fever—Hakodate.**

Typhus fever was reported present at Hakodate during the week ended February 20, 1915, and the week ended March 6, 1915.

PERU.**Plague, Year 1914.**

During the year 1914 plague was notified in Peru, by months, as follows:

Months.	New cases.	Deaths.	Result unknown.	Months.	New cases.	Deaths.	Result unknown.
1914.							
January.....	196	95	3	August.....	22	19	3
February.....	107	42	8	September.....	18	7	.....
March.....	100	50	3	October.....	46	24	4
April.....	62	35	1	November.....	59	32	1
May.....	18	7	.....	December.....	93	47	8
June.....	23	8	1	Total.....	760	386	32
July.....	16	11	.....			

The cases were distributed in the following-named departments: Ancachs, Arequipa, Cajamarca, Lambeyeque, Libertad, Lima, and Piura. The maximum incidence was in January—196 cases, occurring in 8 departments—and the minimum in July—16 cases, occurring in 4 departments.

RUSSIA.

Typhus Fever—Odessa.

During the three weeks ended January 30, 1915, 8 cases of typhus fever were notified at Odessa.

TURKEY.

Typhus Fever—Harput.

Typhus fever was reported present at Harput during the two weeks ended February 13, 1915.

VENEZUELA.

Free Antityphoid Vaccination—Caracas.

According to information dated March 22, 1915, free antityphoid vaccination is being offered by the Board of Health of Caracas.

Typhus Fever—Maracaibo.

During the week ended March 19, 1915, a fatal case of typhus fever was notified at Maracaibo.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX.

Reports Received During Week Ended Apr. 16, 1915.¹

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
India:				
Madras.....	Feb. 14-20.....	4	2	
Madura district.....	do.....	96	77	
Philippine Islands:				
Manila.....	Feb. 7-27.....	16	10	

YELLOW FEVER.

Brazil: Bahia.....	Feb. 7-20.....	1	1	
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¹ From medical officers of the Public Health Service, American consuls, and other sources.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received During Week Ended Apr. 16, 1915—Continued.

PLAGUE.

Places.	Date.	Cases.	Deaths.	Remarks.
Brazil:				
Bahia.....	Feb. 7-27.....	2	1	
Ceylon:				
Colombo.....	Jan 31-Feb. 20....	5	5	
China:				
Hongkong.....	Feb. 18-24.....	1	.....
Cuba:				
Habana.....	Apr. 14.....	1	.....
Pinar del Rio.....	Apr. 9-10.....	2	1	
Dutch East Indies:				
Java—				
Surabaya.....	Jan. 31-Feb. 13....	37	36	Surabaya city: Cases, 21; deaths, 20. Surabaya district: Cases, 16; deaths, 16.
India:				
Bombay.....	Feb. 14-20.....	5	3	
Karachil.....	do.....	1	.....
Madras Presidency.....	do.....	106	79	
Japan:				
Kagi.....	Feb. 28-Mar. 6....	3	3	
Peru:				
Departments—				
Ancahcs.....				Total year 1914: Cases, 34; deaths, 20.
Arequipa.....				Total year 1914: Cases, 54; deaths, 24.
Cajamarca.....				Total year 1914: Cases, 16; deaths, 7.
Callao.....				Total year 1914: Cases, 14; deaths 8.
La Libertad.....				Total year 1914: Cases, 335; deaths, 176.
Lambayeque.....				Total year 1914: Cases, 107; deaths, 47.
Lima.....				Total year 1914: Cases, 106; deaths, 48.
Piura.....				Total year 1914: Cases, 94; deaths, 56.
Turkey in Asia:				
Bagdad.....	Feb. 13-Mar. 2....	40	.....

SMALLPOX.

Australia:				
New South Wales—				
Sydney.....	Feb. 12-25.....	21	.....	City, 8 cases; country districts, 13 cases.
Austria-Hungary:				
Hungary—				
Budapest.....	Feb. 21-27.....	60	.....
Canada:				
Manitoba—				
Winnipeg.....	Mar. 21-27.....	2	.....
Quebec—				
Montreal.....	Mar. 22-Apr. 3....	4	.....
Ceylon:				
Colombo.....	Jan. 31-Feb. 20....	24	5	
China:				
Foochow.....	Feb. 27.....			Present.
Hongkong.....	Feb. 14-27.....	2	1	
Shanghai.....	do.....	3	13	Deaths among natives.
Dutch East Indies:				
Java—				
Batavia.....	Feb. 7-20.....	123	49	In western part.
do.....	do.....	31	13	
Egypt:				
Cairo.....	Feb. 5-18.....	6	3	
France:				
Marseille.....	Jan. 1-Feb. 28....		1	
Great Britain:				
London.....	Mar. 14-20.....	3	.....
Greece:				
Kavala.....	Mar. 7-13....	1	.....
Saloniki.....	Feb. 28-Mar. 13....	5	2	
Guatemala:				
Guatemala.....	Mar. 21-27.....			Present.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received During Week Ended Apr. 16, 1915—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks
India:				
Bombay.....	Feb. 14-20.....	20	5	
Madras.....	do.....	16	1	
Japan:				
Nagasaki.....	Mar. 8-14.....	1		
Taiwan.....	Feb. 22-28.....		1	
Mexico:				
Aguascalientes.....	do.....		1	
Monterey.....	Mar. 1-16.....	17		
Nuevo Laredo.....	Mar. 29-Apr. 3.....		1	
Tampico.....	Mar. 11-20.....		4	
Vera Cruz.....	Feb. 28-Mar. 20.....	58	24	
Russia:				
Odessa.....	Jan. 3-30.....	30	3	
Petrograd.....	Feb. 14-20.....	46	17	
Riga.....	do.....	35		
Spain:				
Madrid.....	Feb. 1-28.....		5	
Valencia.....	Mar. 7-13.....	74	3	
Turkey in Asia:				
Beirut.....	Feb. 22-Mar. 6.....	12	4	

Reports Received from Dec. 26, 1914, to Apr. 9, 1915.

CHOLERA.

Places.	Date.	Cases.	Deaths.	Remarks.
Austria-Hungary:				
Austria.....				Total Sept. 15-Dec. 5: Cases, 3,467; deaths, 937. Total Jan. 4-Feb. 13: 138 cases.
Do.....				Total Nov. 18-Dec. 22: Cases, 741; deaths, 133.
Bohemia.....				Total Sept. 23-Dec. 5: Cases, 176; deaths, 56.
Coast land—				
Trieste.....	Nov. 15-21.....	5		
Galacia.....				Total Sept. 23-Dec. 5: Cases, 2,047; deaths, 793.
Kracow.....	Oct. 4-Dec. 5.....	100	4	
Lisko.....	Sept. 25-Nov. 7.....	355	186	
Przemysl.....	Nov. 1-14.....	132	3	
Lower Austria.				Total Sept. 1-Dec. 5: Cases, 473; deaths, 67.
Vienna.....	Sept. 1-Jan. 30.....	390	42	
Moravia.....				Total Sept. 15-Dec. 5: Cases, 362; deaths, 93.
Brunn.....	Sept. 15-Nov. 21.....	18	3	
Silesia.....				Total Sept. 23-Dec. 5: Cases, 288; deaths, 39.
Styria.....				
Gratz.....	Oct. 3-Nov. 14.....	10		Total Sept. 23-Dec. 5: Cases, 55; deaths, 18.
Upper Austria.....	Oct. 4-Nov. 7.....	3		
Bosnia-Herzegovina.....	Jan. 4-Feb. 6.....	99	60	
Croatia-Slavonia.....	Dec. 31-Jan. 31.....	427	160	Total Oct. 4-10: Case, 1.
Hungary.....	Dec. 31-Feb. 7.....	498	157	Total Oct. 4-10: Case, 1; death, 1.
Do.....				Total Sept. 15-Nov. 30: Cases, 3,024; deaths not yet reported.
Budapest.....	Dec. 25-Feb. 13.....	22	4	Total Nov. 18-Dec. 22: Cases, 452; deaths not reported.
Flume.....	Jan. 25-Feb. 7.....	3	1	
Ceylon:				
Colombo.....	Sept. 5.....	1	1	
China:				Present.
Nanking.....	Nov. 15-21.....			Do.
Wuchow.....	Nov. 27.....			
Dutch East Indies:				
Banca—				
Muntok.....	Dec. 6-12.....	11	7	
Celebes—				
Menado.....	Oct. 18-Dec. 5.....	425	409	
Java—				
Batavia.....	Oct 25-Dec. 26.....	361	343	
Sumatra—				
Lempung.....	Nov. 8-14.....	27	7	
Menulis.....	Oct. 18-Nov. 7.....	65	69	
Palembang.....	Oct. 18-Dec. 19.....	175	147	
Pencoulen district.....	Oct. 25-31.....	88	32	
Telok Betong.....	Nov. 14-Dec. 12.....	47	44	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to Apr. 9, 1915—Continued.

CHOLERA—Continued.

Places.	Date.	Cases.	Deaths	Remarks.
Germany				
Do.	Feb. 21-27	12	1	
Brandenburg	Dec. 6-23	4		In two prison camps, Vicinity of Frankfort on the Oder.
Torgau	Jan. 5-16	1		At Birnbaum.
Posen	Dec. 20-26	2		
Zirka	Jan. 5-16	5		
Silesia	Nov. 8-Dec. 26	46		In 23 localities.
Rosenberg	Jan. 5-16	1		
India				
Bombay	Nov. 1-Jan. 9	9	3	
Calcutta	Nov. 1-28		42	Oct. 25-31: Deaths, 17. Not previously reported.
Madras	Nov. 8-Feb. 13	168	122	
Madura district	Jan. 17-Feb. 13	275	189	
Rangoon	Sept. 1-Dec. 31	6	5	
Indo-China				Jan. 1-Aug. 31: Cases, 239; deaths, 148. Aug. 1-31: Cases, 18; deaths, 15.
Anam				
Binh-Dinh	Oct. 1-Nov. 30	84	42	
Cambodia				
Prum Penh	Aug. 1-Oct. 31	2	1	
Cochin China				
Baria	Aug. 1-31	6	6	And vicinity, Nov. 3-23: Cases, 20; deaths, 10.
Cantho	Oct. 1-31	2		
Cholon	Aug. 1-Nov. 30	70	49	Total Jan. 1-Dec. 20: Cases, 154; deaths, 79.
Saigon	Aug. 1-Feb. 7	405	217	
Laos				
Pakse	Aug. 1-31	1	1	
Tonkin				
Ninh-Binh	Oct. 1-31	11	2	
Japan				Total Jan. 1-Dec. 31: 5 cases, 4 deaths.
Kyoto fu	Oct. 1-31	1	1	
Philippine Islands				
Manila	Oct. 25-Jan. 30	66	37	
Russia				
Moscow	Nov. 8-Jan. 23		4	
Siam				
Bangkok	Sept. 27-Nov. 28		8	
Straits Settlements				
Singapore	Oct. 4-Jan. 30	5	5	

YELLOW FEVER.

Brazil:				
Bahia	Jan. 24-Feb. 6	2		
Rio de Janeiro	Dec. 13-26	2	1	
Ecuador:				
Guayaquil	Nov. 1-30	1		
French Guiana:				
St. Jean du Maroni	Sept. 23-Oct. 10	15	8	At the penal station.
Venezuela:				
Caracas	Dec. 31	1		

PLAGUE.

Bahrein (in Persian Gulf)	Dec. 29			Present.
Brazil:				
Bahia	Nov. 16-Jan. 30	18	15	
Pernambuco	Oct. 11-Dec. 31		12	
Rio de Janeiro	Dec. 20-Jan. 5	2		
Ceylon:				
Colombo	Oct. 25-Jan. 30	59	55	
China:				
Canton				June 12-July 12: Cases, 325.
Hongkong	Dec. 28-Jan. 2	1	1	Chinese.
Shanghai	Dec. 6-Jan. 2		3	Among natives.
Cuba:				
Habana	Feb. 9-Apr. 5	5	5	
Dutch East Indies:				
Provinces:				Total, Oct. 1-Nov. 30: Cases, 2,562; deaths, 2,278.
Kediri	Oct. 1-Nov. 30	730	678	
Madjoe	do	128	110	
Pasoeocean	do	1,405	1,211	
Surabaya	do	299	279	
Do.	Dec. 13-Jan. 30	95	93	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to Apr. 9, 1915—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Ecuador:				
Duran.....	Nov. 1-Jan. 31.....	10	4	
Guayaquil.....	do.....	310	119	
Milagro.....	Dec. 1-31.....	1	1	
Sanborondon.....	Nov. 1-Dec. 31.....	4	3	
Egypt:				Total, Jan. 1-1914-Jan. 28, 1915: Cases, 223; deaths, 116.
Alexandria.....	Nov. 5-28.....	1	1	
Assiout.....	Jan. 28.....	5		
Port Said.....	Oct. 22-Dec. 24.....	9	7	Jan. 1-Dec. 18: Cases, 44, Sept. 12, present in Drama and Kavala.
Greece:				
Piraeus.....	Jan. 17-27.....	1		
India:				Not previously reported.
Bassein.....	Jan. 4-Dec. 5.....	13	10	
Bombay.....	Nov. 1-Feb. 13.....	26	20	
Karachi.....	Nov. 8-Feb. 13.....	19	14	
Madras.....	Nov. 22-Dec. 12.....	6	6	
Madras Presidency.....	Jan. 17-30.....	299	211	
Do.....	Feb. 7-13.....	157	112	
Rangoon.....	Sept. 1-Dec. 31.....	125	117	
Indo-China:				Jan. 1-Aug. 31: Cases, 1,780 deaths, 1,413. Aug. 1-3 Cases, 155; deaths, 121.
Anam—				
Phanitet.....	Aug. 1-31.....	4	1	
Phanrang.....	Aug. 1-Nov. 30.....	12	10	
Phanri.....	Oct. 1-Nov. 30.....	2	1	
Cambodia—				
Kompong-Speu.....	Nov. 1-30.....	5	3	
Pnum Penh.....	Aug. 1-Nov. 30.....	88	84	
Stung-Treng.....	Oct. 1-Nov. 30.....	4	3	
Cochin China—				
Cantho.....	Nov. 1-30.....	3		
Cholon.....	Aug. 1-Nov. 30.....	39	14	
Giadinh.....	Oct. 1-31.....	1		
Saigon.....	Aug. 1-31.....	23	15	
Do.....	Jan. 4-Feb. 7.....	29	12	
Thudaumot.....	Nov. 1-30.....	2	1	
Kouang-Techeou-Wan.....	Aug. 1-Nov. 30.....	70	70	
Tonkin—				
Tong-San.....	Nov. 1-30.....	25	25	
Japan:				Total, Jan. 1-Dec. 31: 485 cases; 110 deaths.
Chiba-ken—				
Komikawa.....	Jan. 1-Dec. 31, 1914	6	6	
Moriyama.....	do.....	5	4	
Ibaraki-ken—				
Isohama.....	do.....	1	1	
Kagi.....	Jan. 24-Feb. 20.....	13	12	
Kanagawa-ken—				
Hodogaya.....	Jan 24-Feb. 13.....	8	6	Including reports previously published in P. H. R.
Kawasaki.....	do.....	1	1	
Ohno-mura.....	do.....	9	8	
Tijima-mura.....	do.....	5	4	
Yokohama.....	do.....	1	1	
Taiwan (Formosa):				
Tokyo-fu.....	do.....	303	275	Do.
Tokyo.....	do.....	47	29	Do.
Dec. 29-Jan. 4.....	1	1		
Libya (Tripoli):				Present in Derna and Marsa-Susa among native laborers.
Mauritius.....	Nov. 6-Jan. 14.....	74		
Persia:				On Caspian coast.
Belessavar.....	Oct. 30-Nov. 9.....	80	80	
Kasri Shireen.....	Dec. 12.....	1		
Peru:				
Callao.....	Nov. 16-Jan. 31.....	8	2	
Catacos.....	do.....	35	3	
Chichayo.....	do.....	30	15	
Chucopé.....	Nov. 16-Jan. 3.....			
Ferrenafe.....	Nov. 16-Jan. 31.....	6		
Guadaloupe.....	Jan. 4-31.....	1	1	
Huancayo.....	do.....	1	1	
Lambayeque.....	Nov. 16-Jan. 31.....	14	5	
Lima (city).....	do.....	16	2	
Lima (country).....	do.....	9	1	
Mollendo.....	do.....	20		
Pacasmayo.....	Nov. 16-Jan. 3.....	1		
Piura.....	Nov. 16-Jan. 31.....	24	7	

April 16, 1915

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to Apr. 9, 1915—Continued.

PLAGUE—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Peru—Continued.				
Salaverry	Nov. 16-Jan. 3...	4		
San Pedro	Nov. 16-Jan. 31...	23		
Trujillo	do	55	8	
Russia:				
Moscow	Dec. 6-Feb. 13...	9	2	
Senegal				
Dakar	Dec. 5...			Present.
Siam:				
Bangkok	Dec. 26-Jan. 23...		5	
Straits Settlements:				
Singapore	Nov. 1-Jan. 30...	13	11	
Turkey in Asia:				
Bagdad	Nov. 1-Dec. 3...	11	9	
Do	Dec. 26-Jan. 5...	12	8	
Do	Jan. 12-Feb. 10...	81	11	
Union of South Africa:				
Queenstown	Feb. 5...			Do.
Zanzibar	Oct. 25-31...	2	3	

SMALLPOX.

Arabia:				
Aden	Nov. 5-Feb. 17...	23	25	
Muttra	Feb. 7-13...			Present.
Argentina:				
Rosario	Oct. 1-31...		1	
* Australia:				
New South Wales—				
Newcastle	Jan. 22-28...	2		
Penrith	Dec. 11-17...	1		
Sydney	Dec. 11-Feb. 4...	14		
Queensland—				
Brisbane				
South Australia	Jan. 3-16...	1		
Austria-Hungary:				
Austria—				
Prague	Jan. 17-23...	1		
Vienna	Oct. 31-Jan. 9...	141	15	
Do	Jan. 17-30...	211	56	
Hungary—				
Budapest	Jan. 31-Feb. 13...	117		
Fiume	Dec. 6-Feb. 7...	4	2	
Brazil:				
Pernambuco	Oct. 1-Dec. 31...		57	
Rio de Janeiro	Nov. 1-Jan. 9...	735	215	
Do	Feb. 7-20...	39	14	
Sao Paulo	Nov. 9-15...	2		
Bulgaria:				
Sofia	June 30-Nov. 28...	121	2	
Canada:				
British Columbia—				
Vancouver	Feb. 8-Mar. 20...	4		
Manitoba—				
Winnipeg	Jan. 24-Mar. 13...	2		
Ontario—				
Hamilton	Jan. 1-Feb. 28...	5		
Sarnia	Dec. 13-Feb. 6...	5		
Toronto	Dec. 6-Mar. 20...	48	1	
Windsor	Jan. 17-Feb. 27...	4		
Quebec—				
Montreal	Dec. 28-Mar. 20...	6		
Quebec	Dec. 13-Jan. 16...	3		
Canary Islands:				
Teneriffe—				
Santa Cruz	Dec. 6-26...		2	
Ceylon:				
Colombo	Oct. 25-Jan. 30...	144	43	

Jan. 13: Cases, 4 from Grand

Trunk ferryboat Lansdowne.

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to Apr. 9, 1915—Continued.

SMALLPOX—Continued.

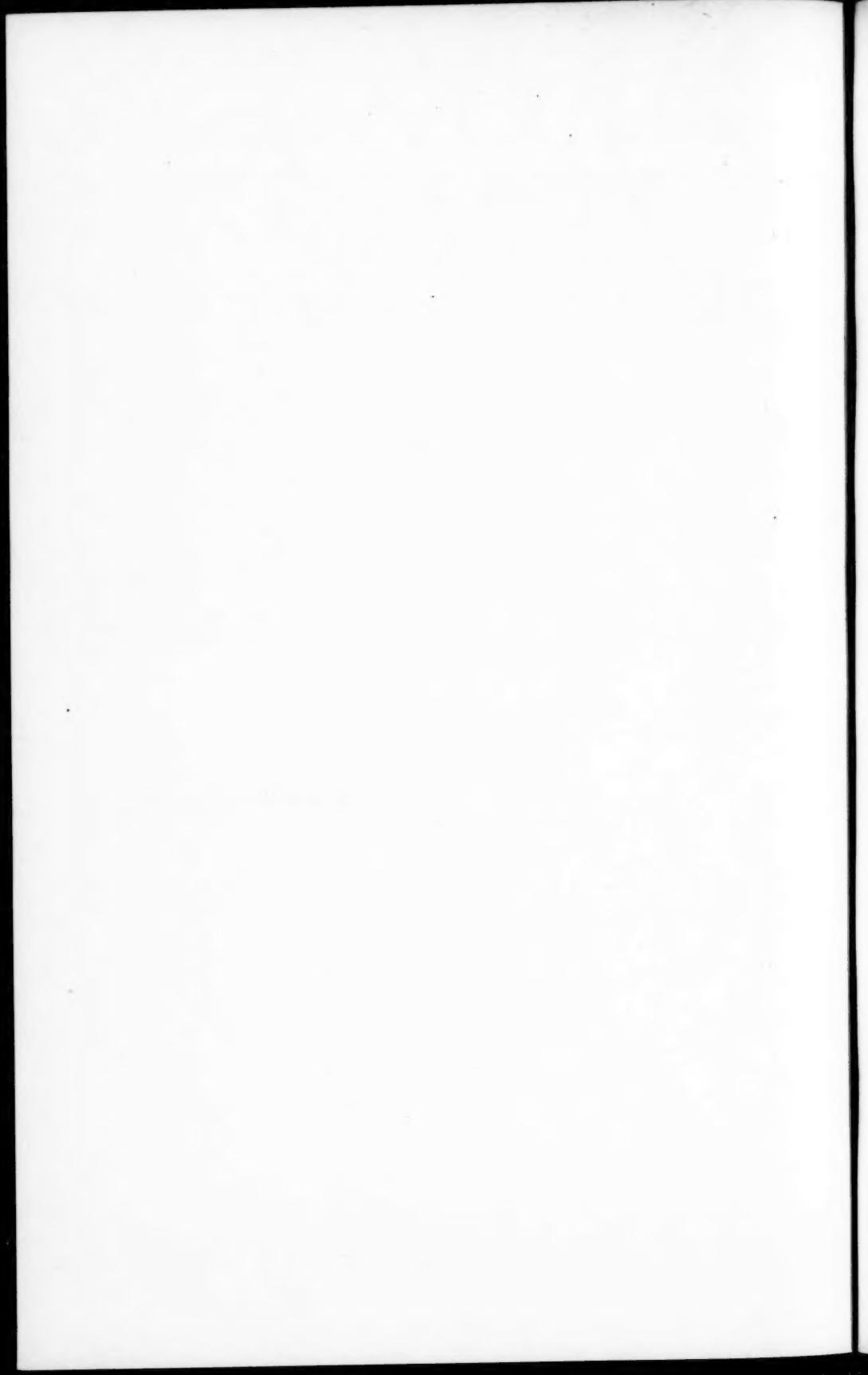
Place.	Date.	Cases.	Deaths.	Remarks.
China:				
Hankow.....	Feb. 7-13.....	1	2	
Hongkong.....	Nov. 22-Feb. 6.....	4	2	Feb. 20, present.
Nanking.....				Do.
Nei-chwang.....				Deaths among natives.
Shanghai.....	Nov. 9-Feb. 13.....	33	73	
Tientsin.....	Dec. 6-12.....		1	
Cuba:				
Guayos.....	Jan. 12-Feb. 10.....	7	1	
Habana.....	Mar. 8-21.....	1	1	Mar. 15: 1 case on steamship Morro Castle.
Dutch East Indies:				
Borneo.....	Nov. 8-14.....	50	30	Oct. 18-24: Cases, 112; deaths, 44, mainly in Pontianak.
Java:				In the western part, including Batavia.
Batavia.....	Jan. 8-Feb. 4.....	362	122	
Do.....	Oct. 18-Nov. 21.....	166	44	
Surabaya.....	Jan. 8-28.....	59	17	
Sumatra—	Nov. 1-7.....	1		
Tepanodji district.....	Dec. 5-29.....	6	2	
Egypt:				
Alexandria.....	Nov. 19-Feb. 25.....	101	27	
Cairo.....	Dec. 3-Feb. 4.....	17	2	
France:				
Havre.....	Dec. 20-26.....	1		
Paris.....	Nov. 15-Dec. 26.....	4	2	
Germany:				Nov. 15-Dec. 19: Cases, 14. Jan. 10-16: 11 cases.
Great Britain:				
Cardiff.....	Nov. 30-Dec. 5.....	5		
Liverpool.....	Dec. 19.....	1		
London.....	Jan. 31-Mar. 13.....	21	3	
Germany:				
Strassburg.....	Jan. 1-31.....	4	1	
Greece:				
Kavala.....	Nov. 22-Feb. 27.....	9		
Kilkish.....	do.....	1		
Patras.....	Nov. 23-Feb. 21.....		18	Jan. 31: Epidemic.
Saloniki.....	Nov. 15-Feb. 20.....	76	61	
India:				
Bombay.....	Nov. 1-Feb. 13.....	150	43	
Calcutta.....	Oct. 25-Nov. 28.....		37	
Karachi.....	Jan. 3-Feb. 6.....	3	1	
Madras.....	Nov. 1-Feb. 13.....	34	8	
Rangoon.....	Oct. 1-Dec. 31.....	3	3	
Indo-China:				
Annam—				
Binh-Dinh.....	Oct. 1-31.....	3		
Phanrang.....	Nov. 1-30.....		1	
Cambodia—				
Pnompenh.....	Oct. 1-Nov. 30.....	2	1	
Cochin China—				
Bac-Lien.....	Nov. 1-30.....	1		
Laos—				
Pakse.....	do.....	1		
Tonkin—				
Hai duong.....	do.....	4		
Haiphong.....	Oct. 1-Nov. 30.....	13	1	
Hanoi.....	Nov. 1-30.....	1		
Italy:				
Milan.....	Dec. 1-31.....	1		
Turin.....	Dec. 21-Jan. 10.....	4		
Japan:				Jan. 1-Dec. 31: Cases, 485; deaths, 110, exclusive of Taiwan.
Kagi.....	Jan. 31-Feb. 6.....	3	3	
Nagasaki.....	Jan. 18-31.....	3	1	
Nagasaki-ken.....	Oct. 1-Dec. 31.....	60	12	
Taiwan.....	Oct. 25-Feb. 20.....	21	3	
Mexico:				
Aguascalientes.....	Dec. 7-Mar. 7.....	19		
Chihuahua.....	Nov. 30-Feb. 15.....	24	15	
Juarez.....	Dec. 4.....			Prevalent.
Mazathan.....	Dec. 9-Feb. 23.....	37	22	
Mexicali.....	Feb. 14-20.....	3		
Monterey.....	Dec. 14-Feb. 28.....	43	2	Feb. 10: Epidemic.
Nuevo Laredo.....	Jan. 31-Feb. 20.....	5	3	
Salina Cruz.....	Nov. 1-7.....	1		
Tampico.....	Dec. 1-Mar. 10.....		21	Prevalent among the military.
Vera Cruz.....	Dec. 1-Feb. 27.....	76	75	

CHOLERA, YELLOW FEVER, PLAGUE, AND SMALLPOX—Continued.

Reports Received from Dec. 26, 1914, to Apr. 9, 1915—Continued.

SMALLPOX—Continued.

Places.	Date.	Cases.	Deaths.	Remarks.
Netherlands:				
Rotterdam.....	Jan. 24-Mar. 6.....	5	1	
Newfoundland:				
St. Johns.....	Jan. 23-29.....	1		
Norway:				
Christiansand.....	Nov. 1-30.....	7	2	Including report, vol. 29.
Stavanger.....	Nov. 30-Dec. 5.....	1		
Persia:				
Teheran.....	Feb. 14-20.....			Present.
Peru:				
Arequipa.....	Feb. 28.....			Epidemic.
Philippine Islands:				
Manila.....	Dec. 20-23.....	2		From steamship Ixion.
Portugal:				
Lisbon.....	Nov. 22-Mar. 6.....	25		
Russia:				
Moscow.....	Nov. 8-Feb. 13.....	131	30	
Odesa.....	Oct. 25-Nov. 18.....	10	1	
Do.....	Nov. 30-Jan. 2.....	68	9	
Petrograd.....	Oct. 25-Feb. 13.....	523	125	
Riga.....	Oct. 11-Dec. 12.....	69		
Santo Domingo:				
Santo Domingo.....	Feb. 1-15.....		2	
Spain:				
Barcelona.....	Nov. 22-Feb. 18.....		44	
Madrid.....	Nov. 1-Jan. 31.....	5	5	
Seville.....	Dec. 1-Jan. 31.....		4	
Valencia.....	Nov. 15-Mar. 6.....	748	25	
Straits Settlements:				
Singapore.....	Oct. 10-Jan. 30.....	17	5	
Sweden:				
Stockholm.....	Dec. 13-19.....		1	
Switzerland:				
Basel.....	Nov. 7-Feb. 27.....	55		
Turkey in Asia:				
Beirut.....	Nov. 1-Feb. 20.....	92	28	
Haifa.....	Nov. 2-Dec. 6.....	14	6	
Jaffa.....	Jan. 10-30.....	3		
Jerusalem.....	Oct. 1-Nov. 30.....	5		
Tripoli.....	Dec. 27-Jan. 9.....	8		
Zanzibar.....	Nov. 14-21.....		7	



SANITARY LEGISLATION.

STATE LAWS AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

DELAWARE.

Communicable Diseases—Notification of Cases—Placarding—Quarantine—Disinfection. (Reg. Bd. of H., Nov. 5, 1914.)

Morbidity reports.—The following diseases are hereby declared by the State board of health of Delaware to be dangerous to the public health and must be reported immediately to the bureau of vital statistics of the State of Delaware, upon blanks provided for that purpose. The report, signed by the physician in charge of the case, or if no physician is in charge, then by the householder or other person in charge of or ministering the case, building, or institution, shall state the disease, the name, the age, the sex, the color of the patient, the duration of the illness, and the exact location of the house or room occupied by the patient, and when more than one case exists in the same household or on the same premises, each case shall immediately be separately reported:

Anthrax.	Pellagra.
Asiatic cholera.	Pneumonia.
Bubonic plague.	Poliomyelitis.
Cerebrospinal meningitis.	Puerperal fever.
Chicken-pox.	Rabies.
Cholera infantum.	Scabies.
Diphtheria (membranous croup).	Scarlet fever (scarlatina, scarlet rash).
Erysipelas.	Smallpox (varioloid).
Glanders.	Tetanus.
Hookworm disease.	Trachoma.
Leprosy.	Tuberculosis (all respiratory forms).
Malaria.	Typhoid fever.
Measles (all forms).	Typhus fever.
Mumps.	Whooping cough.
Ophthalmia neonatorum.	Yellow fever.

All reports must be made on blanks furnished by the State board of health.

Failure to comply with this rule invokes the penalty to comply with the rules and regulations of the State board of health.

Placarding.—Every house in which a case of—

Anthrax,	Poliomyelitis,
Asiatic cholera,	Scarlet fever (Scarlatina, scarlet rash),
Bubonic plague,	Smallpox,
Cerebrospinal meningitis,	Typhoid fever,
Chicken-pox,	Typhus fever,
Diphtheria (Membranous croup),	Whooping cough,
Leprosy.,	Yellow fever,
Measles,	

has occurred or exists, shall be immediately properly placarded by the local board of health in all incorporated towns, and when outside such health limits, then by the physician or person in charge of the case, and remain so until the end of the quarantine. The following diseases shall be quarantined by the following colored placards:

Red —Scarlet fever.	Yellow—Anthrax.
Blue —Diphtheria.	Asiatic cholera.
White—Chicken-pox.	Bubonic plague.
Measles.	Leprosy.
Typhoid fever.	Smallpox.
Whooping cough.	Typhus fever.
Green—Cerebrospinal meningitis.	Yellow fever.
Poliomyelitis.	

All the requirements as at present provided for by the law and other rules and regulations of the State board of health must be complied with.

Quarantine.—Every house in which a case of—

Anthrax,	Measles,
Asiatic cholera,	Poliomyelitis,
Bubonic plague,	Scarlet fever (scarlatina, scarlet rash),
Cerebrospinal meningitis,	Smallpox (varioloid),
Diphtheria (membranous croup),	Yellow fever,
Leprosy,	

exists shall be immediately quarantined by the local board of health in all incorporated towns, and when outside such health limits, then by the physician or person in charge of the case.

Disinfection.—Every house in which a case of—

Anthrax,	Scarlet fever (scarlatina, scarlet rash),
Asiatic cholera,	Smallpox (varioloid),
Bubonic plague,	Tuberculosis (pulmonary),
Cerebrospinal meningitis,	Typhoid fever,
Diphtheria (membranous croup),	Typhus fever,
Leprosy,	Yellow fever,
Poliomyelitis,	

has occurred or exists, shall be completely disinfected upon the recovery, death, or removal from such house of the patient or patients having any of the above-mentioned diseases. All the requirements as at present provided for by the law and other rules and regulations of the State board of health must be complied with.

The above rules and regulations will be rigidly enforced on and after April 1, 1915.

KENTUCKY.

Trachoma and Ophthalmia Neonatorum—Notification of Cases—Measures for the Prevention of. (Act Mar. 9, 1914.)

SECTION 1. That it shall be the duty of the county board of health of each county, acting in cooperation with the county medical society and the State board of health, to arrange for an annual course of instruction or school for the physicians, midwives, and nurses of such county to teach the importance of and the latest and best methods for the early recognition and treatment of, the dangers from, the precautions to be used against, the infection and contagion to all who come in contact with, cases of trachoma and of ophthalmia or any other disease of the eyes of the new born, or with any towel, utensil, or other thing used by or for them; and the importance and imperative duty of at once reporting all cases of such diseases to the county or city health authorities, as may be, and of keeping a true record of all such cases.

SEC. 2. That it shall be the duty of the State board of health to secure the cooperation and assistance of the national health authorities in dealing with these diseases, and to prepare and issue bulletins and other literature containing professional and popular information as to the prevalence and infectious character of such eye diseases, and the precautions to be used against such infections; and to furnish formulæ and other information for the use of physicians and midwives in the management and treatment of such diseases. It shall be the duty of the county boards of health to furnish to physicians and midwives the simple drugs to be used for the indigent in preventing and in treating such diseases.

SEC. 3. That it shall be the duty of every physician and of every midwife who, while in attendance upon a baby under 30 days old or upon its mother, has observed ophthalmia in the new-born baby, and the duty of the head of a family and of trained nurse in a family in which there is a baby under 30 days old and no physician or midwife in attendance, and the duty of trained nurse and of the head of any institution in which there is a baby under 30 days old and no physician or midwife in attendance upon it or its mother, to report the case of ophthalmia in the new born within six hours after observing it to the city board of health, if the case shall have occurred in a city; or if the case shall have occurred outside a city, to the county board of health, within 24 hours after observation. And it shall be the duty of every physician to report each case of trachoma so diagnosed by him as attending or examining physician within five days after such diagnosis. And any physician, midwife, nurse, or head of family who fails to make the report required by this act, shall upon conviction be fined not more than \$100; and persistent failure or refusal on the part of a physician, midwife, or nurse to make such report or to take the necessary precaution to prevent the spread of such diseases shall be a proper ground for the revocation of the right to practice, after due notice and hearing, as now provided by law for the revocation of certificates to practice medicine in this Commonwealth.

SEC. 4. That "ophthalmia in the new born" shall be understood to be "any inflammation, swelling, and redness of either eye, or of both eyes, either apart from or together with any unnatural discharge from the eye or eyes of a baby."

MARYLAND.

Communicable Diseases—Notification of Cases by Physicians. (Chap. 644, Act Apr. 16, 1914.)

SECTION 1. That section 64 of the Code of Public General Laws, title "Health," subtitle "Infectious Diseases," be, and the same is hereby, repealed and reenacted so as to read as follows:

"**SEC. 64.** Whenever any physician knows or has reason to believe that any person whom he is called to visit is infected with smallpox, diphtheria, scarlet fever, typhoid fever, typhus fever, yellow fever, measles, whooping cough, or any other contagious or infectious disease dangerous to public health, he shall immediately give notice thereof in writing over his own signature to the board of health or health officer of the city, town, county, or district in which such disease exists; and if he refuses or neglects to give such notice, he shall be fined not less than \$10 nor more than \$100."

School Physicians—Counties Authorized to Appoint—Salaries and Duties. (Chap. 165, Act Apr. 4, 1914.)

SECTION 1. That the board of county school commissioners of any county in the State, may, in its discretion, appoint one or more school physicians, and assign one to any public school within the limits of such county, and shall provide such school physicians, when so appointed, with proper facilities for the performance of their duties, as hereinafter provided.

SEC. 2. That school physicians appointed as outlined in section 1, shall be physicians legally qualified to practice medicine in this State who have had at least two years' experience in the practice of their profession.

SEC. 3. That every school physician so appointed shall make a prompt examination of all children referred to him, as hereinafter provided, and such further examination of teachers, janitors, and school buildings, as in his opinion the protection of the health of the pupils may require. He shall return promptly to the authorities appointing him, on blanks furnished as hereinafter provided, the results of his examinations.

SEC. 4. That the superintendent, principal, or teacher or any school to which a school physician has been assigned, as hereinafter provided, shall refer to such physician every child returning to school without a permit from the health officer or board of health, after absence on account of illness or from unknown cause, and every child attending such school who appears to be in ill health or is suspected to be sick with any contagious or infectious disease, unless such child is immediately excluded from school, under the provisions of the general statutes or the sanitary regulations in force in said town or district: *Provided*, That in the case of schools in remote and isolated locations the school authorities may make such other arrangements as may be advisable to carry out the purposes of this act.

SEC. 5. That the board of county school commissioners of any county, which has appointed one or more school physicians, in accordance with the provisions of this act, shall cause every child attending the public schools therein to be separately and carefully tested and examined at least once in every two years to ascertain whether such child is suffering with defective sight or hearing, or from any other physical disability tending to prevent such child from receiving the full benefit of school work, or requiring a modification of such school work, in order to prevent injury to the child, or to secure the best educational results; and the school authorities may establish special classes for these defective children, and may employ additional teachers for this purpose.

SEC. 6. That notice of the disease and defects, if any, from which any child is found by such school physician to be suffering shall be given to the parent or guardian of such child with such advice relating thereto as said physician may deem advisable, and whenever any child shows symptoms of any contagious or infectious disease notice shall also be given to the health officer or board of health, and such child may be excluded from attendance at such school, in accordance with the provisions of the general statutes or the sanitary regulations in force in the town or district. Visiting nurses may also be employed to visit the parents to assist in securing the medical attention required.

SEC. 7. That the school physician shall be paid for the services rendered, such amount as the school authorities of the respective counties shall deem proper and sufficient under the particular circumstances, and shall pay the same from the general funds in their hands, such compensation not to exceed \$2 per hour actually given to examinations in the schools.

SEC. 8. That the State superintendent of public education shall prescribe, after consultation with the State board of health, the directions for tests of sight and hearing, and shall prescribe for the school authorities of the State suitable rules of instruction, test cards, blanks, record books, and other useful appliances for carrying out the purposes of this act.

SEC. 9. That no person suffering from any communicable disease shall be employed as teacher or janitor in any public school in this State. At the opening of each annual term teachers must furnish a health certificate from a registered physician, addressed to the superintendent of schools, certifying that they are not suffering from tuberculosis or other communicable disease.

SEC. 10. That the State board of education shall provide for pupils in the normal schools suitable instruction and practice for testing the sight and hearing of school children.

SEC. 11. That the expenses incurred under the provisions of this act, shall be paid in the same manner as the ordinary expenses for the support of schools in the several counties of the State.

SEC. 12. That all acts or parts of acts in conflict with the provisions of this act are hereby repealed in so far as they are in conflict herewith.

SEC. 13. That this act shall take effect July 1, 1914.

Births and Deaths—Registration of. (Chap. 747, Act Apr. 13, 1914.)

SECTION 1. That sections 8, 10, 11, 12, 14, 15, 16, and 19 of article 43¹ of the Code of Public General Laws of Maryland, title "Health," subtitle "State Registrar of Vital Statistics," be and the same are hereby repealed and reenacted, with amendments, so as to read as follows:

SEC. 8. Each election district, city and incorporated town shall constitute a registration district: *Provided*, That the State registrar may combine two or more registration districts in any county into one registration district, provided the total population of the districts so combined does not exceed 100,000. The county registrar shall, with the advice and consent of the local board of health, designate a competent person in each registration district who shall act as local registrar, and shall within the district for which he is appointed receive death certificates and issue burial permits upon the same and receive birth certificates and perform such other services under this act as the local board of health may direct: *Provided*, That when, in the judgment of the State, registrar of vital statistics, it is necessary to appoint more than one deputy local registrar in any registration district, the State registrar shall authorize and direct the local registrar of vital statistics to designate and appoint as many additional competent persons to act as deputy local registrars as the State registrar may deem necessary. Each deputy local registrar appointed as herein provided shall accept the appointment in writing, and it shall be his duty to act as local registrar in his stead in case of absence, illness, or disability and when it is necessary in order to promote public convenience to do so, and who shall be subject to all rules and regulations governing local registrars. No local registrar or deputy local registrar shall issue any permit for the disposition of any dead body excepting upon the presentation of a proper and correct certificate of death, nor shall he in any case issue a permit for the disposition of any body already interred, entombed, transported, removed, cremated or in any other manner disposed of except as provided in this act. Each deputy local registrar shall, on the last day of each month, transmit to the local registrar all certificates of birth or death in his possession.

Every local registrar shall, on or before the fifth day of each month, transmit to the State registrar of vital statistics in the envelopes furnished for that purpose the originals of all certificates of birth or death remaining in his possession on the last day of the month next preceding, and if there are no such certificates of birth or death remaining in his possession he shall immediately certify such fact to the State registrar in writing. The local registrar shall at the time of mailing his returns to the State registrar mail to the county registrar a copy of all certificates of birth or death certified as correct under his hand and remaining in his possession on the last day of the month next preceding: *Provided*, That the State registrar may in the event of unusual sickness or mortality or for the purpose of legal, legislative, or other inquiry, require of any local registrar returns at shorter intervals: *And provided*, That in case of births and deaths occurring in the city of Baltimore, the State registrar shall not require the return to him of the original certificates of births and deaths, but only such transcripts, tables, figures, and compilations as may seem to him advisable or necessary.

It shall be the duty of all local registrars and deputy local registrars to receive death certificates and issue burial permits thereon, as hereinafter provided, and accept birth

¹ Public Health Reports, Dec. 20, 1912, p. 2141.

certificates, and shall note over his signature the date on which such certificate was filed and shall forward all certificates in his possession as hereinbefore provided. And shall also perform all the other duties of a local registrar provided in this act.

No sexton or person in charge of any premises in which interments are made shall inter or permit the interment or other disposition of any body unless it is accompanied by a burial permit, as provided in this act. And each sexton or person in charge of any burial ground shall indorse upon the permit the date of interment, over his signature, and shall return all permits so indorsed to the local registrar of his district within 10 days from the date of interment. He shall also keep a record of all interments made in the premises under his charge, stating the name of the deceased person, place of death, date of burial, and name and address of the undertaker.

SEC. 10. Every county registrar shall distribute to all local and deputy local registrars and other persons within his jurisdiction who, in his judgment, are likely to need them, blank forms of certificates and returns, supplied to him by the State registrar of vital statistics; shall execute the provisions of all local ordinances or regulations not contrary to this act that may be enacted to more effectually insure correct registration of births and deaths; shall record in the books furnished by the State registrar of vital statistics such facts as may be therein required; shall amend his records in red ink over his signature as he may discover mistakes or omissions, and shall immediately notify the State registrar of vital statistics in writing of such amendments; shall, if possible, keep such records in a fireproof safe. And on or before the 15th of each month send to the State registrar of vital statistics all certified copies of births and deaths furnished to him by local registrars within his county as provided in section 8.

SEC. 11. No interment of the dead body of any human being, or disposition thereof by entombment, cremation, transportation, interment, or any other manner or form of disposition shall be made without a permit as aforesaid from the local registrar or deputy local registrar of the district where said person died, or otherwise than in accordance with such permit.

The certificate of death shall be filled out and signed by the physician last in attendance upon the deceased person within 48 hours after death, excepting in such cases where the body is viewed by the coroner and an inquest is held upon the same, in which case the certificate of death shall be filled out and signed by the coroner. In case of death without medical attendance or in case of sudden or violent death in which the coroner does not deem it necessary to hold an inquest, the certificate of death shall be filled out and signed by the health officer, and in event of the absence of the health officer to promptly act, then the local registrar or deputy local registrar shall execute and sign a proper and correct certificate of death from the best information available, and all such certificates of death shall be presented to the undertaker or other person authorized to make disposition of the body. No person whose duty it is under the provisions of this act to make out and sign a certificate of death shall make out and sign more than one certificate of death, except those authorized to do so under the provisions of this act. In all cases of death from smallpox, yellow fever, diphtheria, scarlet fever, or other contagious or infectious disease dangerous to public health, the interment shall be conducted according to the rules of the State board of health.

The transportation of the body of any deceased person from one district to another district, or from one county into another county, or from this State into any other State, Territory, or District of Columbia, or from this State to any foreign country, or the transportation of any dead body from any other State, Territory, or District of Columbia into this State or any foreign country into this State, shall be under such rules and regulations as the State board of health shall prescribe.

Transit permits shall only be issued by application to the local registrar or deputy local registrar upon the presentation of a proper and complete certificate of death,

April 16, 1915

as provided in section 9 of this act, or an application for a disinterment permit, as provided in section 12 of this act. The same to be accompanied by a burial permit, which shall be full and legal authority for interment or other disposition in any part of the State. The burial permit issued as provided in this act shall be full and legal authority for interment in any part of this State.

In the event of the death of any person without the jurisdiction of the United States, or in the event of the death of a person within the jurisdiction of any of the United States, where such death is not recorded by the authorities having jurisdiction, a burial permit may be issued by the local registrar or deputy local registrar at the place to which such body is conveyed in this State upon presentation of a proper and correct certificate of death as hereinbefore provided.

SEC. 12. Application for a permit to disinter a human body shall be made to the local registrar or deputy local registrar for a disinterment permit on the form prescribed by the State registrar. Upon receipt of such an application properly made out, the local registrar or deputy local registrar shall issue a permit for the disinterment. The permit for a disinterment shall be made upon a form prescribed by the State registrar of vital statistics under the provisions of this act. No disinterment permit shall be issued in any case where death was caused by infectious disease within one year, except by permission of and under the direction of the State registrar of vital statistics.

SEC. 14. In the event of the birth of any child without the attendance of either a physician or midwife, it shall be the duty of the father, coroner, householder, keeper of any workhouse, house of correction, prison, hospital, reformatory, almshouse, or other institution, master or other commanding officer of a ship or vessel, and the conductor of any railroad train to report in writing within four days next succeeding the birth to the local registrar or deputy local registrar of the registration district wherein such birth occurs the full name of the mother, the full name of the father, if it can be ascertained, date, hour, and place of birth, and the sex and color of the child, and it shall be the duty of the local registrar or deputy local registrar to whom such report is presented to immediately investigate the same and to execute and send a proper and correct certificate of birth, as provided by section 9 of this act.

And all physicians, midwives, informants, or undertakers, and all other persons having knowledge of the facts, are hereby required to furnish such information as they may possess regarding any birth or death upon demand of the State registrar, in person, by mail, or through the local registrar.

In the event of an alteration of any certificate of birth or death, the facts shall be properly certified to the State registrar and entered in red ink over his signature.

SEC. 15. The records of births and deaths shall be preserved by the county registrar and shall be open to inspection for proper purposes by all city, town, or county officials, by the State registrar or his accredited representative, provided that such examination shall be made in such a way that the contents of the registers shall not be subjected to risk of damage or alteration and prompt registry of births and deaths received by the registrar shall not be interrupted. The county registrar shall promptly inquire into the facts when any omissions or discrepancies in the personal or statistical facts are called to his attention; shall truly ascertain such missing facts of record and make a certified statement thereof to the State registrar and enter the correction in red ink over his official signature upon his record. The county registrar shall further inquire into and investigate all violations or suspected violations of this act and shall furnish to the State registrar full data and information regarding the same.

SEC. 16. The county registrar shall receive for performing the services required under this subtitle the following fees: For each full record of birth or death, 25 cents, to be paid by the county upon warrant of the county commissioners: *Provided*, That in any county where the county health officer or registrar receives a salary of \$800

per annum or more he shall receive 10 cents for each birth or death recorded in his register instead of 25 cents.

The deputy local registrar shall receive for performing the services required under this subtitle the following fees: For each proper and correct certificate of death or birth delivered by him to the local registrar as provided in this act, the sum of 25 cents, to be paid by the county upon warrant of the county commissioners.

The local registrar shall receive for performing the services required under this subtitle the following fees: For each proper and correct record of birth or death as provided in this act, except those transmitted to him by any deputy local registrar, the sum of 25 cents, to be paid by the county upon warrant of the county commissioners, and in the case where such records are transmitted by the deputy local registrar such deputy local registrar shall receive such fee in his stead. For each transcript of a birth or death as provided in section 8 of this act to be transmitted to the county registrar, the local registrar shall receive the sum of 10 cents, to be paid by the county upon warrant of the county commissioners. The State registrar shall certify to each county, local, and deputy local registrar quarterly, if it shall be considered expedient, the number of properly executed certificates of births and deaths received from each county, local, or deputy local registrar for which fees are provided by this section for the year or portion of a year included.

The State registrar shall certify on each certificate the total amount owing to the person to whom such certificate is issued: *Provided*, That the State registrar shall certify separately the number of incomplete, defective, or belated certificates, and for such incomplete, defective, or belated certificates a fee shall be certified equal to one-half the amount of compensation provided in this section for proper and correct certificates and records of births and deaths.

SEC. 19. That every physician, midwife, and undertaker shall, without delay, register his or her name, address, and occupation with the local registrar of the district in which he or she resides or may hereafter establish a residence, and shall thereupon be supplied by the local registrar with a copy of this act, together with such rules and regulations as may be prepared by the State board of health relative to its enforcement. Within 30 days after the close of each calendar year each local registrar shall make a return to the State registrar of all physicians, midwives, and undertakers who have been registered in his district during the whole or any part of the preceding calendar year: *Provided*, That no fee or other compensation shall be charged by local registrars to physicians, midwives, or undertakers for registering their names under the section or making returns thereof to the State registrar.

That all superintendents or managers or other persons in charge of hospitals, alms-houses, lying-in or other institutions, public or private, to which persons resort for treatment of diseases or are confined or are committed by process of law are hereby required to make record of all the personal and statistical particulars relative to the inmates in their institutions at the date upon which this act takes force and effect that are required in the forms or the certificates provided for in this act, as directed by the State registrar, and thereafter such record shall be by them made for all future inmates at the time of their admission. And in case of persons admitted or committed for medical treatment of disease the physician in charge shall specify for entry in the record the nature of the disease, and where, in his opinion, it was contracted. The personal particulars and information required by this section shall be obtained from the individual himself if it is practicable to do so, and when they can not be obtained they shall be secured in as complete a manner as possible from relatives, friends, or other persons acquainted with the facts.

MASSACHUSETTS.

Venereal Diseases—Appropriation for Establishment of Laboratory Facilities for Diagnosis of. (Chap. 295, Act Apr. 6, 1914.)

The sum of \$4,000 is hereby added to the appropriation of the State board of health for general expenses for the purpose of establishing laboratory facilities for the diagnosis of venereal diseases.

Medical and Surgical Chests Required in Factories. (Chap. 557, Act May 22, 1914.)

Chapter 514 of the acts of the year 1909 is hereby amended by striking out section 104 and inserting in place thereof the following new section:

“SECTION 104. Every person, firm, or corporation operating a factory or shop in which machinery is used for any manufacturing or other purpose except for elevators, or for heating or hoisting apparatus, shall at all times keep and maintain, free of expense to the employees, such medical or surgical chest, or both, as shall be required by the State board of labor and industries, and containing plasters, bandages, absorbent cotton, gauze, and all other necessary medicines, instruments and other appliances for the treatment of persons injured or taken ill upon the premises, and every person, firm or corporation carrying on a business in a mercantile establishment in which 20 or more women or minors are employed, shall in like manner provide such medical and surgical chest as the State board of labor and industries may require. A person, firm, or corporation violating any provision of this section shall be punished by a fine of not less than \$5 nor more than \$500 for every week during which such violation continues.”

Sewage—Entrance or Discharge of, into Assabet River Prohibited. (Chap. 655, Act June 10, 1914.)

SECTION 1. The State board of health is hereby authorized and directed to prohibit the entrance or discharge of sewage into any part of the Assabet River or its tributaries, and to prohibit the entrance or discharge therein of every other substance which may be injurious to public health or may tend to create a public nuisance.

SEC. 2. The board shall consult and advise with the owner of any factory or other establishment, or any municipality discharging any substance into the Assabet River, at his or its request, or of its own motion, as to the best practicable and reasonably available means of rendering the waste or refuse therefrom harmless, and any order or finding by the board shall be *prima facie* evidence of compliance or noncompliance with the provisions of section 1 of this act.

SEC. 3. The supreme judicial court or any justice thereof, and the superior court or any justice thereof, shall have jurisdiction in equity to enforce the provisions of this act and of any order made by the State board of health in conformity therewith, and to enjoin the entrance or discharge into any part of the Assabet River or its tributaries of sewage or of any other substance which is, or which said board shall have determined may be, injurious to public health or tending to create a public nuisance. Proceedings to enforce any such order or to obtain such an injunction shall be instituted and prosecuted by the attorney general at the relation of the State board of health.

SEC. 4. Whoever, contrary to any order of the State board of health, permits the entrance or discharge into any part of the Assabet River or its tributaries of sewage or of any other substance injurious to public health or tending to create a public nuisance, shall be punished by a fine not exceeding \$500 for each offense.

NEW JERSEY.

Lead Poisoning—Notification of Cases—Measures for the Prevention of. (Chap. 162, Act Apr. 14, 1914.)

1. *General duties of employers.*—Every employer shall, without cost to the employees, provide reasonably effective devices, means, and methods to prevent the contraction by his employees of any illness or disease incident to the work or process in which such employees are engaged.

2. *Especially dangerous work or processes.*—(a) Every work or process in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate, or fluo-silicate, is hereby declared to be especially dangerous to the health of the employees who, while engaged in such work or process, are exposed to lead dusts, lead fumes, or lead solutions.

(b) Every work or process in the manufacture of pottery, tiles, or porcelain enameled sanitary ware is hereby declared to be especially dangerous to the health of the employees who, while engaged in such work or process, are exposed to lead dusts or lead solutions.

3. *Duties of employers to provide safety appliances for the protection of employees in especially dangerous works or processes.*—Every employer shall, without cost to the employees, provide the following devices, means, and methods for the protection of his employees who, while engaged in any work or process included in section 2, are exposed to lead dusts, lead fumes, or lead solutions:

(a) Working rooms, hoods, and air exhausts for the protection of employees engaged in any work or process which produces lead dusts or lead fumes. The employer shall provide and maintain workrooms adequately lighted and ventilated, and so arranged that there is a continuous and sufficient change of air, and all such rooms shall be fully separated by partition walls from all departments in which the work or process is of nondusty character; and all such rooms shall be provided with a floor permitting an easy removal of dust by wet methods or vacuum cleaning, and all such floors shall be cleaned either by wet method or vacuum cleaner daily.

Every work or process referred to in section 2, including the corroding or oxidizing of lead, and the crushing, mixing, sifting, grinding, and packing of all lead salts or other compounds referred to in section 2, shall be so conducted and such adequate devices provided and maintained by the employer as to protect the employee, as far as possible, from contact with lead dust or lead fumes. Every kettle, vessel, receptacle, or furnace in which lead in any form referred to in section 2 is being melted or treated, and any place where the contents of such kettles, receptacles, or furnaces are discharged, shall be provided with a hood connected with an efficient air exhaust; all vessels or containers in which dry lead in any chemical form or combination referred to in section 2 is being conveyed from one place to another within the factory shall be equipped, at the places where the same are filled or discharged, with hoods having connection with an efficient air exhaust; and all hoppers, chutes, conveyers, elevators, separators, vents from separators, dumps, pulverizers, chasers, dry pans, or other apparatus for drying pulp lead, drying-pans dump, and all barrel packers and cars or other receptacles into which corrosions are at the time being emptied shall be connected with an efficient dust-collecting system; such system to be regulated by the discharge of air from a fan, pump, or other apparatus, either through a cloth dust collector having an area of not less than one-half square foot of cloth to every cubic foot of air passing through it per minute, the dust collector to be placed in a separate room which no employee shall be required or allowed to enter, except for essential repairs, while the works are in operation; or such other apparatus as will efficiently remove the lead dusts from the air before it is discharged into the outer air.

(b) *Washing facilities.*—The employer shall provide a wash room or rooms for such employees, which shall be separate from the workrooms, be kept clean, and be equipped with:

(1) Lavatory basins fitted with waste pipes, and two spigots conveying hot and cold water; or

(2) Basins placed in troughs fitted with waste pipes, and for each basin two spigots conveying hot and cold water; or

(3) Troughs of enamel or similar smooth impervious material fitted with waste pipes, and for every 2 feet of trough length two spigots conveying hot and cold water.

Where basins are provided there shall be at least one basin for every five such employees and where troughs are provided at least 2 feet of trough length for every five such employees. The employer shall also furnish nail brushes and soap, and shall provide at least three clean towels per week for each such employee. A time allowance of not less than 10 minutes, at the employer's expense, shall be made to each of such employees for the use of said wash room before the lunch hour and at the close of the day's work.

The employer engaged in the manufacture of white lead, red lead, litharge, sugar of lead, arsenate of lead, lead chromate, lead sulphate, lead nitrate, or fluo-silicate shall also provide at least one shower bath for every five such employees. The baths shall be approached by wooden runways, be provided with movable wooden floor gratings, be supplied with controlled hot and cold water, and be kept clean. The employer shall furnish soap and shall provide at least two clean bath towels per week for each employee. An additional time allowance of not less than 10 minutes, at the employer's expense, shall be made to each such employee for the use of said baths at least twice a week at the close of the day's work. The employer shall keep a record of each time that such baths are used by each employee, which record shall be open to inspection at all reasonable times by the department of labor of this State and also by the State board of health.

(c) *Dressing rooms.*—The employer shall provide a dressing room or rooms which shall be separate from the workrooms, to be furnished with a double sanitary locker, or two single sanitary lockers for each such employee, and be kept clean.

(d) *Eating rooms.*—The employer shall provide an eating room, or eating rooms for such employees, and such rooms shall be separate from the workrooms, be furnished with a sufficient number of tables and seats, and be kept clean. No such employee shall take or be allowed to take any food or drink of any kind into any workroom, nor shall any such employee remain or be allowed to remain in any workroom during the time allowed for his meals.

(e) *Drinking fountains.*—The employer shall provide and maintain a sufficient number of sanitary drinking fountains readily accessible for the use of such employees.

(f) *Clothing.*—The employer shall provide at least two pairs of overalls and two jumpers for each such employee and repair or renew such clothing when necessary and wash the same weekly. Such clothing shall be kept exclusively for the use of that employee.

(g) *Respirators.*—The employer shall provide and renew when necessary at least two reasonably effective respirators for each employee who, while engaged in any work or process which produces lead dusts, is exposed to such dusts: *Provided*, If at any time it is shown to the satisfaction of the commissioner of labor of the State of New Jersey, in the case of any manufacturer or process or any operation forming part thereof in the potteries, that injury to health is adequately prevented by other appliances or any other condition than those prescribed by law, he may modify the whole or any part of the law so far as it applies to such pottery manufacture or process.

4. Duties of employees in especially dangerous works or processes to use the safety appliances provided by the employers:

Every employee who, while engaged in any work or process included in section 2, is exposed to lead dusts, lead fumes, or lead solutions shall—

(a) Use the washing facilities provided by the employer in accord with section 3 (b), and wash himself at least as often as a time allowance is therein granted for such use;

(b) Use the eating room provided by the employer with section 3 (d), unless the employee goes off the premises for his meals;

(c) Put on and wear at all times, while engaged in such work or process, a suit of the clothing provided by the employer in accord with section 3 (f), and remove the same before leaving at the close of the day's work; and keep his street clothes and working clothes, when not in use, in separate lockers or separate parts of the locker provided by the employer in accordance with section 3 (e);

(d) Keep clean the respirators provided by the employer in accordance with section 3 (g), and use one at all times while engaged in any work or process which produces lead dusts and is exposed to such dusts.

5. *Notices.*—The employer engaged in any of the processes mentioned in section 2 shall post in a conspicuous place in every workroom where any work or process included in section 2 is carried on, in every room where washing facilities are provided, in every dressing room and eating room, a notice of the known dangers arising from such work or process and simple instructions for avoiding, as far as possible, such dangers. The commissioner of labor shall prepare a notice containing the provisions of this act, and shall furnish, free of cost, a reasonable number of copies thereof to every employer included in section 2, and the employer shall post copies thereof in the manner hereinabove stated. The notices required in this section shall be printed in plain type on cardboard, and shall be in English and in such other languages as the circumstances may reasonably require. The contents of such notices shall be explained to every employee who may be exposed to lead dusts, lead fumes, or lead solutions, by the employer when the said employee enters employment in such work or process, interpreters being provided by the employer, when necessary, to carry out the above requirements.

6. *Medical examination.*—The employer shall cause every employee, who, while engaged in any work or process included in section 2, is exposed to lead dusts, lead fumes, or lead solutions, to be examined at least once a month for the purpose of ascertaining if symptoms of lead poisoning appear in any employee. The employee shall submit himself to the monthly examination, and to examination at such other times and places as he may reasonably be requested by the employer, and he shall fully and truly answer all questions bearing on lead poisoning asked him by the examining physician. The examination shall be made by a licensed physician, designated and paid by the employer, and shall be made during the working hours, a time allowance therefor, at the employer's expense, being made to each employee so examined.

7. *Record and reports of medical examination.*—Every physician making any examination under section 6 and finding what he believes to be symptoms of lead poisoning shall enter, in a book to be kept for that purpose in the office of the employer, a record of such examination, containing the names and addresses of the employees so examined, the particular work or process in which he is engaged, the date, place, and finding of such examination, and the directions given in each case by the physician. The record shall be open to inspection at all reasonable times by the department of labor and by the State board of health.

Within 48 hours after such examination and finding, the examining physician shall send a report thereof in duplicate, one copy to the department of labor and one to the State board of health. The report shall be on or in conformity with blanks furnished

by the State board of health, free of cost, to every employer included in section 2, and shall state:

- (a) Name, occupation, and address of employee.
- (b) Name, business, and address of employer.
- (c) Nature and probable extent of disease.
- (d) Such other information as may be reasonably required by the State board of health.

The examining physician shall also, within the said 48 hours, report such examination and find to the employer, and after five days from such report the employer shall not continue the said employee in any work or process where he will be exposed to lead dusts, lead fumes, or lead solutions, nor return the said employee to such work or process without a written permit from a licensed physician.

8. *Enforcement.*—The commissioner of labor shall enforce this act and prosecute all violations of the same. The said commissioner, the assistant commissioner, and the inspectors of the said department shall be allowed at all reasonable times to inspect any place of employment included in this act.

9. *Penalties.*—Every employer who, either personally or through any agent, violates or fails to comply with any provision of section 1 or section 3 of this act shall be liable to penalties of \$50 for the first offense, \$100 for the second offense, and \$300 for the third and each subsequent offense. Every employee who violates or fails to comply with any provision of section 4 of this act, shall be liable to a penalty of \$10 for the first offense and \$25 for the second and each subsequent offense. Every employer who, either personally or through an agent, violates or fails to comply with any provisions of sections 5, 6, or 7 of this act, relating to him, shall be liable to a penalty of \$50 for each offense, and every employee who violates or fails to comply with any provision of section 6 of this act, relating to him, shall be liable to a penalty of \$10 for each offense.

10. Any and all penalties prescribed by any of the provisions of this act shall be recovered in an action of debt by and in the name of the commissioner of labor of the State of New Jersey. The pleading shall conform in all respects to the practice prevailing in the court in which any such actions shall be instituted, but no pleading or process shall be set aside or invalidated by reason of any formal or technical defects therein, if the same contain a statement of the nature of the alleged violation and of the section of this act alleged to have been violated, and, upon the attention of the court being called to any such formal or technical defect, the same shall be immediately corrected, and the said pleading or process amended as a matter of course, and as to all other defects in pleading or process, the same may be amended in the discretion of the court as in any other action or proceeding in said court.

11. When judgment shall be rendered against any defendant other than a body corporate, execution shall be issued against his goods and chattles and body without any order of the court for that purpose first had and obtained. If the officer executing any such writ shall be unable to find sufficient goods and chattles of said defendant in his bailiwick to make the amount of said judgment, he shall take the body of the said defendant and deliver him to the keeper of the common jail of said county, there to be detained until discharged by the court in which such judgment was obtained or by one of the justices of the supreme court, when such court or justice shall be satisfied that further confinement will not result in the payment of the judgment and costs. In case judgment shall be rendered against a body corporate, execution shall be issued against the goods and chattles of such body corporate as in other actions of debt. Any penalty recovered in any action brought under the provisions of this act shall be paid to the plaintiff therein, who shall pay the same to the treasurer of the State of New Jersey.

12. *Definition.*—In this act, unless the context otherwise requires, "employer" includes partnerships and corporations.

13. In case for any reason any section or any provision of this act shall be questioned in any court, and shall be held to be unconstitutional or invalid, the same shall not be held to affect any other section or provision of this act.

14. *Time of taking effect.*—This act shall take effect on the 1st day of October, 1914, except as to subdivisions (a), (b), (c), and (d) of section 3, which subdivisions shall take effect as follows:

Subdivisions (b), (c), and (d) of section 3, on the 1st day of October, 1915.

Subdivision (a) of section 3, on the 1st day of October, 1916.

TEXAS.

Plague—Prevention of—Appropriation for. (Act Mar. 23, 1915.)

SECTION 1. That for the purpose of enabling the State health officer of the State of Texas to employ such assistants as he deems necessary to assist in preventing the bubonic plague from getting a foothold in the State of Texas, and also to ascertain if it now exists at any of the seaports of the State, there is hereby appropriated out of the money of the State treasury not otherwise appropriated, the sum of \$25,000, or so much thereof as may be necessary, to be expended under the direction of the State health officer and to be paid upon warrants drawn by the State comptroller of public accounts on vouchers approved by the State health officer.

Anthrax—Suppression and Eradication of—Appropriation for. (Act Mar. 15, 1915.)

SECTION 1. That the sum of \$4,000, or so much thereof as may be necessary, be, and the same is hereby, appropriated out of the general revenue fund not otherwise appropriated, to be used for the suppression and eradication of charbon disease, or anthrax, now threatening the stockmen of the State of Texas, said sum to be expended under the supervision of the State board of health.

VERMONT.

Venereal Diseases—Notification of Cases—Prevention of the Spread of. (Act Mar. 23, 1915.)

SECTION 1. A person who, knowing himself to be infected with gonorrhea or syphilis marries, shall be fined not more than \$500 or imprisoned in the house of correction for not more than two years.

SEC. 2. A person who, while infected with gonorrhea or syphilis, has sexual intercourse shall be fined not more than \$500 or imprisoned in the house of correction for not more than one year.

SEC. 3. A physician who knows or has reason to believe that a person whom he treats or prescribes for is infected with either gonorrhea or syphilis, shall immediately report the name, address, age, and sex of such person to the secretary of the State board of health, for which report he shall receive the sum of 25 cents, to be paid by the State board of health. A physician who fails to make such report shall be fined not more than \$200.

SEC. 4. The State board of health shall make and enforce such rules and regulations for the quarantining and treatment of cases of gonorrhea and syphilis reported to it as may be deemed necessary for the protection of the public. Said board shall not disclose the names or addresses of persons reported or treated to any person other than a prosecuting officer or in court on prosecutions under this act.

SEC. 5. During the months of January and July of each year said State board of health shall pay to physicians all sums due for reports made under the provisions of this act.

SEC. 6. The sum of \$1,000 is annually appropriated for carrying out the provisions of this act.

SEC. 7. Section 2 of No. 213 of the acts of 1912 is hereby repealed.

VIRGINIA.

Births and Deaths—Registration of—Registrars—Fees. (Chap. 83, Act Mar. 13, 1914.)

1. That the sections 2, 4, and 19 of an act entitled an act to provide for the immediate registration of all births and deaths throughout the State of Virginia, by means of certificates of births and deaths, and burial or removal permits; to require prompt returns to the bureau of vital statistics at the capitol of the State, as required to be established by the State board of health; to insure the thorough organization and efficiency of the registration of vital statistics throughout the State; to provide certain penalties; to repeal all acts and parts of acts in conflict herewith, approved March 12, 1912,¹ be, and the same are hereby, amended and reenacted so as to read as follows:

“Sec. 2. That the State board of health shall have general supervision over the bureau of vital statistics, which is hereby authorized to be established by said board, and which shall be under the immediate direction of the State registrar of vital statistics, whom the State board of health shall appoint. Salary of the registrar of vital statistics shall be fixed by the State board of health from the day of his entering upon the discharge of the duties of his office. The State board of health shall provide suitable apartments for the bureau of vital statistics at Richmond, which shall be properly equipped with fireproof vaults and filing cases, for the permanent and safe preservation of all records made and returned under this act.”

“Sec. 4. That in cities and towns the principal executive officer of the local board of health shall be the local registrar of vital statistics, and that in magisterial districts justices of the peace shall be local registrars of vital statistics for such portions of the districts as the State registrar shall designate: *Provided, however,* That if any justice of the peace refuses to act as local registrar, or where there is no acting justice of the peace, that, in such event, the State registrar shall appoint a suitable and proper person to be the local registrar for such district, or portion of such district as said registrar may designate. Any local registrar who fails or neglects to discharge efficiently the duties of his office, as laid down in this act, or who fails to make prompt and complete returns of births and deaths, as required thereby, shall be therewith removed from his office of registrar by the State registrar, and his successor appointed in addition to any further penalties that may be imposed under other sections of this act for failure or neglect to perform his duty.”

“Sec. 19. That each local registrar shall be paid the sum of 25 cents for each birth certificate and each death certificate properly made out and registered with him, correctly recorded and promptly returned by him to the State registrar, as required by this act, and in case no births or deaths were registered during any month, the local registrar shall be entitled to be paid the sum of 25 cents for a report to that effect, but only if properly made in accordance with this act.

“All amounts payable to a registrar under the provisions of this section shall be paid by the treasurer of the city, town, or county in which the registration district is located, upon certification by the State registrar. And the State registrar shall annually certify to the treasurers of the several cities, towns, and counties the number of births and deaths properly registered, with the names of the local registrars and the amounts due each at the rate fixed herein: *Provided,* That the council of any city may by ordinance, in lieu of fees, provide for the compensation of the local registrar for such city by salary: *Provided further,* That the State registrar shall make no certification of fees due until a receipt from the county clerk for the record books of the year shall have been received by him from the local registrar: *And provided further,* That the fees or salaries now paid the principal executive officer of the local board of health of any city or town, who shall become the local registrar of such city or town under the provisions of this act, may be, in lieu of all compensation or fees as herein provided: *Provided, however,* Payment may be made by fees as in the counties.”

¹ Public Health Reports, Jan. 31, 1913, p. 233.

Dead Bodies—Transportation of—Embalming. (Chap. 351, Act Mar. 27, 1914.)

1. That section 1743 of the code of Virginia, prescribing rules for the transportation of dead bodies, as amended by act approved January 30, 1912,¹ be amended and reenacted so as to read as follows:

"RULE 1. Regulations regarding the transportation of the dead.—A copy of the original death certificate on the standard certificate of death form, signed by attending physician, permit of local board of health or registrar, and a transit label signed by the shipping funeral director, and initial baggage agent, printed on strong white paper, supplied through the State department of health by the public printer, shall be required for the transportation by common carriers of bodies of persons dying in this State. The death certificate shall contain such information as is required in the standard form of death certificate, if obtainable. The health officers or registrar's permit shall authorize the transportation of the body of the person described in the physician's certificate. The shipping funeral director shall state on the shipping label how the body is prepared, and the local baggage agent shall state thereon the route, name, and address of escort.

"The physician's and health officer's or registrar's permit shall be given the escort, to be delivered with the body at destination. The shipping label shall be securely attached to the outside case. If the body is sent by express, the physician's certificate and the permit shall be attached to the express waybill and delivered with the body at the destination, and the shipping label shall be attached to the outside case.

"RULE 2. The transportation of bodies dead of smallpox, plague, Asiatic cholera, yellow fever, typhus fever, diphtheria (membranous croup or diphtheritic sore throat), scarlet fever (scarlet rash or scarlatina), erysipelas, anthrax, and leprosy shall be permitted only under the following conditions: The body shall be thoroughly embalmed with an approved disinfectant fluid, all orifices shall be closed with absorbent cotton, the body shall be washed with the disinfectant fluid, enveloped in a sheet saturated with the same, and placed at once in the coffin or casket, which shall be immediately closed, and the coffin or casket, or the outside case containing the same, shall be metal or metal lined, and hermetically and permanently sealed.

"RULE 3. The transportation of bodies dead of any diseases other than those mentioned in rule 2, shall be permitted under the following conditions:

"A. When the destination can be reached within 24 hours after death, the coffin or casket shall be inclosed in a strong outside box made of good sound lumber, not less than seven-eighths of an inch thick, all joints must be tongued and grooved, top and bottom, put on with cleats or cross pieces, all put securely together, and be tightly closed with white lead, asphalt varnish or paraffin paint, and a rubber gasket placed on the upper edge between the lid and box: *Provided, however,* That caskets containing embalmed bodies may be shipped to points in this State in tight ordinary casket boxes: *And provided further,* That bodies addressed to the anatomical board of this State may be received for shipment when prepared in such manner as the State board of health may direct.

"B. When the destination can not be reached within 24 hours after death, the body shall be thoroughly embalmed, and the coffin or casket placed in a strong well made outside shipping case.

"RULE 4. No disinterred body, dead from any disease or cause, shall be transported by common carriers, unless approved by health authorities having jurisdiction at the place of disinterment, and a transit permit and transit label shall be required, as provided in rule 1. The disinterment and transportation of bodies dead of diseases mentioned in rule 2 shall not be allowed except upon permission of the health authorities at both places of disinterment and the point of destination. All disinterred remains for transportation shall be incased in metal casket or metal

¹ Public Health Reports, April 25, 1913, p. 815.

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lined boxes and hermetically sealed: *Provided*, That bodies in a receiving vault, when prepared by licensed embalmer, shall not be regarded as disinterred bodies until after the expiration of 30 days.

"RULE 5. The outside case may be omitted in all instances when the body is transported in hearse or funeral director's wagon.

"RULE 6. Every outside case shall bear at least four handles, and when over 5 feet 6 inches in length, shall bear six handles.

"RULE 7. An approved disinfectant fluid shall contain not less than 5 per centum of formaldehyde gas; the term embalming as employed in these rules shall require the injection by a licensed embalmer of not less than 10 per centum of the body weight for bodies of persons dead of diseases in rule 2, injected arterially, in addition to cavity injection; and not less than 6 per centum of the body weight injected arterially in all other cases in addition to cavity injection, and 10 hours shall elapse between the time of embalming and the shipment of the body.

"RULE 8. The attached form of death certificate, health offices or registrar's permit, and label as described herein, with these rules printed thereon, shall be used in this State for the shipment of bodies as herein provided.

"RULE 9. Any violation of this act shall be deemed a misdemeanor and punishable by a fine of not less than \$10 nor more than \$25 for the first offense, and a fine of not less than \$25 nor more than \$50, or imprisonment not exceeding 30 days, or both fined and imprisoned in the discretion of the court, for each additional offense."

Milk, Cream, and Ice Cream—Cleansing and Sterilizing of Receptacles Used in Transportation of. (Chap. 155, Act Mar. 20, 1914.)

1. That no person, company, or corporation shall furnish or provide any can or other receptacle used for the purpose of transporting milk, cream, or ice cream intended for human consumption or for manufacture into a product for human consumption, nor shall any person, company, or corporation use any cans or other receptacles for the purpose of transporting milk, cream, or ice cream intended for human consumption or for the manufacture into a product for human consumption, unless said can or other receptacle and the cover or stopple thereto be thoroughly cleansed and sterilized by the use of hot water or steam, or both hot water and steam, before said can or other receptacle is delivered to the person who is to fill the same, or before said can or other receptacle is used for the purpose of transporting milk, cream, or ice cream, as above set out.

2. Every person, company, or corporation who shall receive milk, cream, or ice cream, which is delivered in cans, bottles, or other receptacles shall thoroughly cleanse and sterilize such receptacle with hot water or steam, or both hot water and steam as soon as practicable after the contents are removed, and before the said receptacles are returned to the shippers or persons from whom the same were received.

3. Any person who shall be convicted for violating any of the provisions of this act shall be fined the sum of \$5 for each bottle, can, or other receptacle furnished or used which has not been cleansed and sterilized as herein provided.

Tuberculin Test of Cows—Disposition of Reacting Animals. (Chap. 245, Act Mar. 24, 1914.)

1. That under the direction of the live stock sanitary board and the State dairy and food commissioner, the State veterinarian shall from time to time apply the tuberculin test to breeding or dairy cows, as may be directed by the said State live stock sanitary board and the State dairy and food commissioner, for the purpose of controlling in the herds of the State the disease known as tuberculosis, and under such rules and regulations as may be prescribed from time to time by said board and commissioner: *Provided*, That no tuberculin test or tests shall be applied to any animal

or animals in this State unless requested by the owner or owners thereof, and the further agreement by the owner or owners of such animals as may be submitted for tests to meet such requirements as may be made by the said live stock board and commissioner.

That all reacting animals shall be surrendered to the State, said animals to be disposed of according to such rules and regulations as may be prescribed by said board and commissioner, the owner of said reacting animals to receive in compensation of said reacting animals a sum as may be agreed upon between the owner of said reacting animals and the said commissioner and board and not to exceed \$40.

Provided further, That in case of pure bred and registered animals, unless segregated under the Bangs's method, the owner of such reacting registered animals shall receive a sum for any such registered animals as may be agreed upon by the said commissioner and board, not to exceed \$80, and for the purpose of carrying out the provisions of this act that the sum of \$5,000 annually, or as much thereof as may be needed, be, and the same is hereby, appropriated.

That the net proceeds received from the sale of carcasses made by the State of reacting animals be covered into the State treasury and be used for the same purpose as the regular appropriation.

The actual and necessary expenses incident to the execution of the provisions of this act shall be audited and paid as the other expenses of the office of the State dairy and food commissioner. The State live stock sanitary board and the State dairy and food commissioner, acting jointly, shall make and publish from time to time such rules and regulations as they may deem proper for carrying out the provisions of this act.

The dairy and food commissioner shall make an annual report to the governor, which report shall cover the work done during that period and with any incidental information concerning same which the said board and commissioner may deem proper; also a complete accounting of all moneys expended for the preceding fiscal year.

Rabies—Running at Large of Dogs Prohibited. (Chap. 164, Act Mar. 21, 1914.)

1. That it shall be the duty of every person owning or having in charge any dog or dogs, to at all times confine such dog or dogs to the limits of his own premises or the premises on which such dog or dogs is, or are, regularly kept: *Provided*, That nothing in this act shall be construed to prevent the owner of any dog or dogs, or other person or persons having such dog or dogs in his or their charge, from allowing such dog or dogs to accompany such owner or other person or persons elsewhere than on the premises on which such dog or dogs is, or are, regularly kept.

Any person violating this act shall be deemed guilty of a misdemeanor and shall be fined not less than \$2 nor more than \$50.

This act shall not apply to the running at large of any dog or dogs within the corporate limits of any city or town in this State that require a license tag to be kept on dogs. But this act shall not apply in any county in this State until the same has been adopted by the board of supervisors of such county.

Factories, Workshops, Offices, Etc.—Sanitary Regulation—Adequate Toilet Facilities to be Provided. (Chap. 286, Act Mar. 25, 1914.)

1. That every factory in which five or more persons are employed, and every factory, workshop, mercantile or other establishment, or office, in which two or more children, under 18 years of age, or women, are employed, shall be kept clean and free from effluvia arising from any drain, privy or nuisance, and shall be provided with a sufficient number of water-closets, earth closets or privies, and reasonable access be afforded thereto; and whenever one or more males and one or more females are employed together, a sufficient number of separate water-closets, earth closets or privies

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shall be provided for the use of each sex, and plainly designated; and no person shall be allowed to use a closet or privy which is provided for persons of the other sex: *Provided*, In buildings used exclusively for offices the provisions of this section shall not apply, if separate toilets are within convenient access in the buildings wherein the offices are located.

2. The owner, lessee or occupant of any premises which are used as described in the preceding section shall make the changes necessary to conform thereto. If such changes are made upon the order of the commissioner of labor by the occupant or lessee of the premises, he may, within 30 days after the completion thereof, bring an action against any other person who has an interest in such premises, and may recover such proportion of the expense of making such changes as the court may adjudge should be equitably borne by such other interested party defendant.

3. If it appears to the commissioner of labor that any act, neglect, or fault in relation to any drain, water-closet, privy, ash pit, water supply, nuisance, or other matter in a factory or workshop included under the provisions of section 1 is punishable or remediable under any law relative to the preservation of the public health, but not under the provisions of this chapter, he shall give notice in writing thereof to the board of health of the city or county in which such factory or workshop is situated or to the State health commissioner, and such board of health or State health commissioner shall thereupon inquire into the subject of the notice and enforce the laws relative thereto.

4. A criminal prosecution shall not be instituted against a person for the violation of the provisions of sections 1 and 2 until four weeks after notice in writing by the commissioner of labor of the changes necessary to be made to comply with the provisions of said section has been sent by mail or has been delivered to such person, nor if such changes shall have been made in accordance with such notice. A notice shall be sufficient under the provisions of this section if given to one member of a firm, or to the clerk, cashier, secretary, agent, or any other officer who has charge of the business of a corporation, or to its attorney, and in case of a foreign corporation, to the officer who has charge of such factory or workshop, and such officer shall be personally liable for the amount of any fine, if a judgment against the corporation is returned unsatisfied.

The application of this law to stores and office buildings in cities of 5,000 inhabitants or less and in towns of 5,000 inhabitants or less shall be left to the discretion of the commissioner of labor.

6. Any person, firm, or corporation who shall violate the provisions of this act shall be deemed guilty of a misdemeanor, and, upon conviction thereof, be subject to a fine of not less than \$5 nor more than \$25, and each day of such violation may constitute a separate offense.

MUNICIPAL ORDINANCES, RULES, AND REGULATIONS PERTAINING TO PUBLIC HEALTH.

GREENVILLE COUNTY, S. C.

Board of Health—Organization, Powers, and Duties—Health Officer. (Act 390 Gen. Assembly of S. C., Feb. 28, 1914.)

SECTION 1. *County board of health for Greenville.*—That a county board of health is hereby created for the county of Greenville, to be composed of seven members, at least two of whom shall be practicing physicians, who shall be appointed by the Greenville County delegation in the general assembly. That two of said members shall be appointed for one year; two for two years; two for three years, and one for four years, and hereafter, upon the expiration of their respective terms, each member shall be appointed to serve for a period of two years. The members of said board shall serve without compensation, and in case any one of said members, after accepting and being duly appointed, shall refuse to qualify and serve on said board he shall be subject to a fine of \$25, to be imposed and collected by any magistrate in said county.

SEC. 2. *Powers and authority of board.*—The said county board of health shall have all the powers and authority now conferred by law upon local and municipal boards of health, and shall be subject to the orders of the said [sic] board of health of South Carolina. It shall be the duty of said county board to cooperate with the municipal board of health of the city of Greenville for the promotion of health and for the enforcement of needful sanitary rules and regulations.

SEC. 3. *Meetings.*—The said board of health shall hold an annual meeting in the month of October of each year, and such meetings during the year as they may deem necessary. That at the annual meeting in October it shall be the duty of said county board to organize by the election of one of its members as chairman, and one as secretary, who shall serve without compensation. That it shall be the duty of said board at said annual meeting to elect a county health officer, who shall hold office for one year from the date of his election, and who shall be paid a salary from the treasury of Greenville county in the same manner as now provided by law for other county officers, said salary to be \$1,000 per annum.

SEC. 4. *County health officer.*—That said county health officer shall take the oath of office prescribed for all county officers and shall have the health powers now conferred by law upon municipal health officers, and shall further exercise all the powers and authority of magistrate's constables.

SEC. 5. *Rules and regulations.*—The said board of health shall have power and it shall be their duty to make and enforce all needful rules and regulations to prevent the introduction and spread of infectious and contagious diseases by the regulation of intercourse with infected places, by the arrest, separation, and treatment of infected persons, and persons who shall have been exposed to any contagious or infectious diseases, and by abating and removing all nuisances which they shall deem prejudicial to the public health, to enforce vaccination, to mark infected houses or places, to prescribe rules for the construction and maintenance of house drains, waste pipes, soil pipes, and cesspools, and make all such other regulations as they may deem necessary for the preservation of the public health. They shall also have power, with the consent of the county delegation, in case of the prevalence of any contagious or infectious diseases within the county to establish one or more hospitals and to make provisions and regulations for the management of the same.

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JERSEY CITY, N. J.

Ice—Care and Sale—Permit Required—Inspection—Premises and Vehicles. (Ord. Oct. 8, 1914.)

SECTION 1. That every person, partnership, or corporation desiring to engage in the business of selling ice, either at wholesale or retail, within the limits of the city of Jersey City, shall first obtain a permit from the health bureau of said city to engage in said business.

SEC. 2. Any person or persons, firm, or corporation desiring to engage in the business of selling ice at retail for domestic use or for use in any place where such ice may come in direct contact with any article of food or drink, shall first procure a separate permit for each wagon or depot where such ice is handled or sold. For each depot one metal license plate shall be issued by the health bureau, which shall be prominently displayed in the place where such ice is sold. With each permit for vehicle or wagon engaged in the business of selling or transporting ice for sale at retail, two license plates shall be issued by the said health bureau, which shall be prominently displayed on the outside of each wagon or vehicle so engaged, one on the right side and the other on the left side.

SEC. 3. Before any such permit shall be granted by the health bureau, an application to the said bureau shall be made by the party seeking such permit, which application shall be signed by such party, or if a corporation, by its authorized agent, and shall state the post-office address of said party or corporation desiring to engage in the said ice business, the name under which the place or places of business is conducted, the character of said business, whether wholesale or retail, and the name of the party or parties, firm or corporation from whom the ice is procured. Before such permit is granted the applicant shall pay the said health bureau a fee of \$2 for each and every wagon, cart, or vehicle used in the transportation, sale, or distribution of ice. Every such permit shall expire on the 30th day of April next succeeding the date on which it was granted, unless sooner forfeited or revoked.

SEC. 4. Upon the request of the health bureau any person or persons, or firm or corporation to whom such permit shall be granted, shall at any time during the period of its existence furnish any further information in writing which said health bureau may demand of the nature required in the last preceding section. If such information is not furnished to said health bureau within five days after request for the same, said permit shall, after the said five days period, be void, and thereafter no person or persons, firm or corporation, shall be protected thereby in any manner whatsoever. Nothing herein contained, however, shall prohibit the party whose permit shall thus become inoperative from making application for a new permit.

SEC. 5. Before any permit shall be issued for the sale of ice at retail from any store or depot or other place of business, the premises where such ice is to be stored or sold shall be inspected by an inspector from the health bureau, and no permit shall be issued to carry on such ice business unless the conditions existing on such premises shall conform to the sanitary requirements of the health bureau relating to such places. And if the conditions of the premises do not conform to the sanitary requirements of the health bureau, application for a permit to carry on said ice business shall be denied. And if, the application having been denied, the premises shall be made to conform to the sanitary requirements of the health bureau, a permit to sell ice on said premises shall be issued.

SEC. 6. Before any permit shall be issued for the sale of ice at retail from any wagon, cart, or other vehicle, said wagon, cart, or other vehicle shall be brought to the street in front of the city hall for inspection, and if any such wagon, cart, or other vehicle so inspected shall be deemed unsuitable for the sanitary keeping or delivery of ice, permit shall not be issued for the sale or delivery of ice from such wagon, cart, or other vehicle until such conditions as are found shall have been removed or remedied.

SEC. 7. Every wholesale dealer in ice shall keep the premises where such ice is stored, or from which such ice is delivered to retailers, in a clean and sanitary condition and shall provide a conveniently-situated supply of city water with which the interior of wagons, carts, or other vehicles receiving ice from such warehouse or platform, and the ice so delivered may be washed free from sawdust, dirt, or other contamination, and no ice shall be received at any such warehouse, storehouse, or platform from any boat, barge, scow, railway car, or other vehicle for transportation that was not in a clean and sanitary condition at the time the ice was placed therein.

SEC. 8. All ice to be sold in Jersey City for domestic use or for use in any place where any article of food or drink may come directly in contact with the ice, must be pure and wholesome, must be cut from a pure and uncontaminated lake or stream or manufactured from pure and uncontaminated water, and which, on chemical and bacterial examinations, can be shown to be free from nitrates or pathogenic bacteria.

SEC. 9. All vehicles for the retail sale or delivery of ice for domestic use shall be thoroughly washed on every occasion before such ice is placed therein, and the ice to be so used shall likewise be washed clear of all dirt before being placed in said vehicle for delivery, and no vehicle for the sale or delivery of such ice shall at any time be used for any purpose likely to render such vehicle permanently unsanitary, and vehicles for the delivery or sale of ice for domestic use shall not, at the same time that they contain such ice, be used for the purpose of delivery of any other article except coal, and all such coal shall be kept entirely separate and free from contact with such ice and shall not be held in sacks or other containers which may be in a dirty or unsanitary condition.

SEC. 10. All places where ice is kept or stored for sale for domestic use must be provided with a suitable chest or box for storing this ice, which shall conform in all respects to the requirements of the plumbing code of the health bureau of Jersey City, and all ice to be sold must be kept at all times in such ice boxes or chests, and that no ice to be sold shall be kept or stored in cellars or basements in the said city of Jersey City.

SEC. 11. All ice for domestic use, when in carts, wagons, or other vehicles used for the sale or delivery of same, shall be kept covered with sail cloth, canvas, or similar cotton material kept in a cleanly condition, and no material other than this shall be used for covering such ice.

SEC. 12. In the delivery of ice to retailers or for domestic use, such ice shall be handled with ice tongs and not with the hands, and in so delivering ice it shall not at any time be deposited in the street nor on the sidewalk unless a piece of canvas or sail cloth has first been placed on the sidewalk where the ice is to be deposited. And ice shall not be allowed to stand on any sidewalk for a longer period of time than is sufficient to allow for its convenient transference to a proper receptacle in the depot from which it is to be sold.

SEC. 13. Any permit granted under this ordinance may be revoked by the superintendent of the health bureau for the violation of any provision of this ordinance or for any other good cause shown and after an opportunity has been granted to the holder of such permit to be heard by such superintendent of health bureau. During the pendency of such procedure, said superintendent of health bureau shall, in his discretion, order the permit to be suspended, and all transactions thereunder shall be discontinued under the penalties herein provided for sales of ice without a permit.

SEC. 14. Any person or persons, firm, or corporation violating or authorizing any violation of this ordinance shall, upon conviction, be fined not less than \$10 nor more than \$25.

NEW YORK, N. Y.

Births—Registration of Those Not Previously Recorded. (Chap. 461, Act Apr. 20, 1914.)

SECTION 1. Section 1241 of the Greater New York charter, as reenacted by chapter 466 of the laws of 1901, and amended by chapter 886 of the laws of 1911, is hereby amended to read as follows:

"SEC. 1241. The births of the children of actual residents of the city of New York, which may have occurred during the temporary absence of the parents of such children from the city of New York, and the births of children which failed to be recorded through the neglect of the physician or other medical attendant present at such birth, may be recorded in the bureau of records of the health department of said city upon the application in such behalf by the parents or guardians of such children. Such application shall be made to the commissioner of health, and shall be accompanied by a certificate of the physician or midwife attending professionally at such birth and personally cognizant thereof, together with the affidavit of at least two citizens, certifying to their knowledge of the facts, and that the physician or midwife making such certificate of birth is a reputable person in good standing in the community in which he or she may reside. Where the physician or midwife, as the case may be, who attended professionally at any such birth is dead or can not be found after due diligence, or where no physician or midwife attended professionally at such birth, the application to record such delayed birth certificate shall, in addition to the affidavits above mentioned, be accompanied by a certificate signed by the father, mother, or guardian upon a form prescribed by the said department of health. Where such physician or midwife is dead, the application must be accompanied by proof of death when such fact is known to the applicant, and, where such physician or midwife can not be found after due diligence, as aforesaid, the application must be accompanied by the affidavit, or affidavits, setting forth in detail the efforts made to locate such physician or midwife.

"No such birth shall be recorded without proof satisfactory to and upon the approval of the commissioner of health of all the facts and circumstances required to be stated in the application and papers mentioned herein. Such power to pass upon and approve such applications may, however, be delegated by the said commissioner of health, in writing, to the registrar of records of the department of health for such period and to such extent as shall be specified in such delegation. No change or alteration shall, at any time, be made in any of the records of the said bureau of records in said city, without proof satisfactory to and upon the approval of the said commissioner of health. The said commissioner of health may, however, delegate, in writing, such power to the registrar of records of the department of health for such period and to such extent as shall be specified in such delegation. Transcripts of any record in said bureau of records may be given, in the discretion of the department of health, to a parent or the next of kin of the person relating to whom the record was filed, or said latter person's duly authorized representative. Such transcripts shall be on such forms as the commissioner of health may prescribe, and for them the usual fees for copies of records may be received. No transcripts, however, of false or fraudulent returns made to the said bureau or of the entries thereof, shall be given; and shall be canceled upon due proof of the facts to the department of health."

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